AEROSOL AGE

SCIENCE

THE MAGAZINE OF PRESSURE PACKAGING

JANUARY, 1961

NEWEST Alfco Spray-Can Handle MAINTAINS QUALIT

DRASTICALLY REDUCES YOUR COS

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JANUARY, 1961 VOL. 6, No. 1

AEROSOL AGE

The magazine of pressure packaging

THIS MONTH'S COVER

Edward H. Seymour, president and founder of Seymour of Sycamore, Inc., Sycamore, Ill., heads one of the more enterprising of the young aerosol paint marketers. Here shown with his wide range of aerosol products, Mr. Seymour, his plant, and his aerosol paint market forecast are discussed in an article beginning on page 20.

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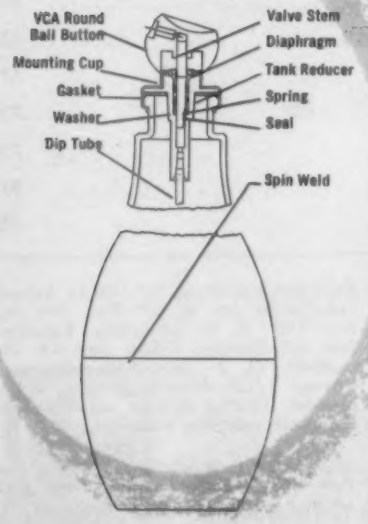
AVON SCORES AGAIN!

Naturally, with a VCA

METERED VALVE and ACTUATOR

AVON'S Buttons 'n' Bows

VCA B18F METERED VALVE



...the first two-piece 'spin welded' plastic aerosol container made of DuPont's DELRIN* with Metered Spray Control. The cologne mist is accurately controlled by a VCA B18F, 100 mg discharge metered valve with a round ball actuator.

- DELRIN was chosen because it is lightweight, strong, impact and corrosion resistant, and has the ability to hold propellents and a great variety of aerosol products.
- VCA valves were chosen because they assure perfect, accurate operation and control of the delicate fragrance. No waste, no fuss!

Avon's Buttons 'n' Bows, the ultimate in modern plastic packaging, is just another example of VCA-Customer cooperation to produce aerosols with outstanding sales quality.

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VCA technical engineers are ready to assist you, too. Call today!

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INDUSTRY MEETING CALENDAR

Association of American Soap & Glycerine Producers, Annual Meeting, Waldorf-Astoria Hotel, New York. .....**Jan. 25-27**

American Chemical Society, National Meeting, St. Louis, Mo......**March 21-30**

Chemical Specialties Manufacturers Association, Meeting of Board of Governors, Division Executive Boards and Committees, Hotel Peabody, Memphis, Tenn. **March 8-9**

National Packaging Exposition and National Packaging Conference of American Management Association, Exposition Center, Chicago.....**April 10-13**

Chemical Specialties Manufacturers Association, 47th Mid-Year Meeting, The Drake Hotel, Chicago **May 15-17**

Chemical Specialties Manufacturers Association, Meeting of Board of Governors, Division Executive Board and Committees, Oyster Harbors Club, Osterville, Mass. .....**Sept. 25-27**

Chemical Specialties Manufacturers Association, 48th Annual Meeting, Roosevelt Hotel, New York, N. Y. .....**Dec. 4-8**

•

Claim Labels Are Not Read

Too many consumers don't understand how to use insecticides, their limitations, and even their hazards—despite the fact careful instructions are printed on labels. This warning was made to a November meeting of the Entomomological Society of America, in Atlantic City, N. J., by Dr. Hazel K. Stiebeling, director of home economics research in the U. S. Department of Agriculture.

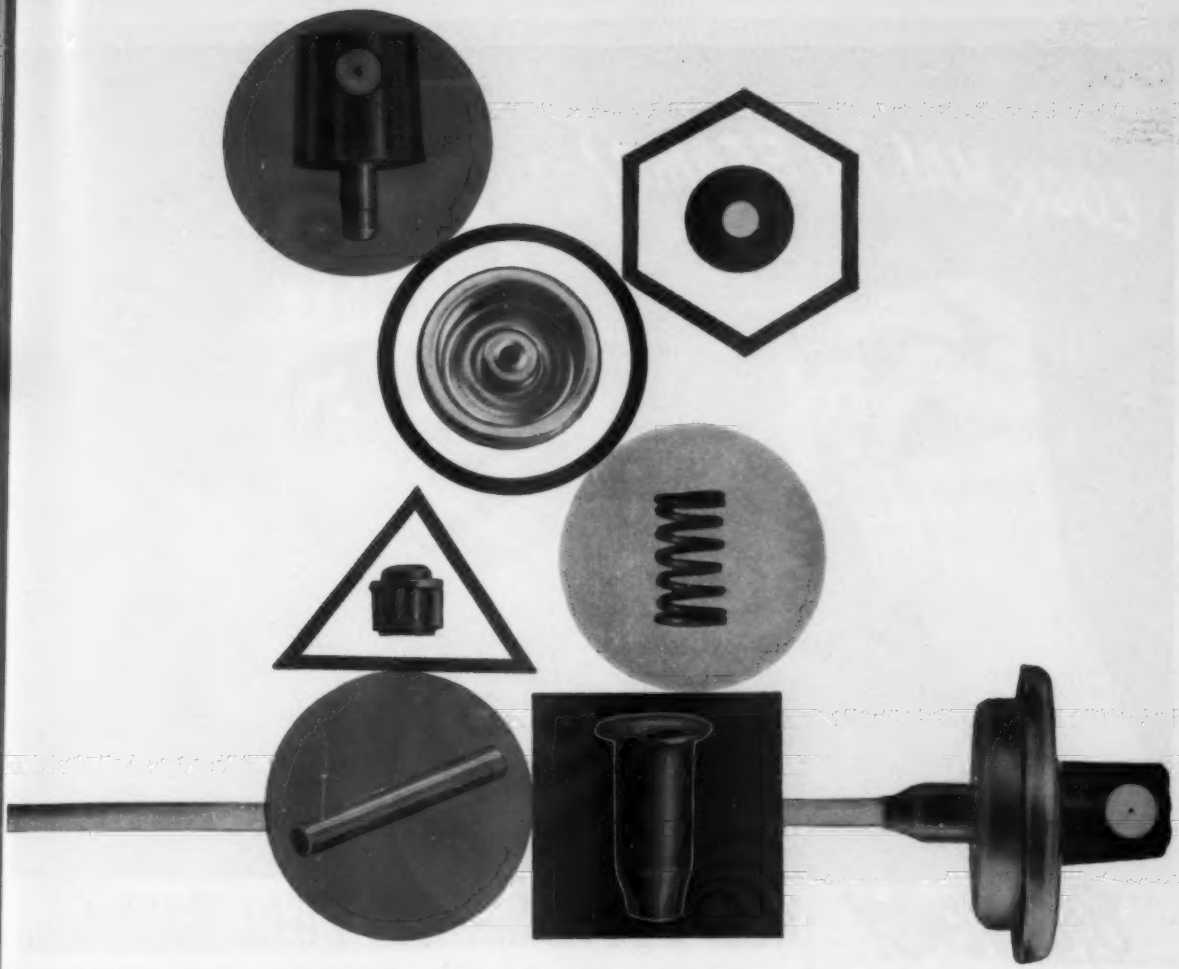
Praising entomologists for giving the American consumer greater power to make homes more comfortable, home gardening more rewarding, and outdoor living more enjoyable, Dr. Stiebeling pointed out that consumer need to know more about the proper and safe uses of insecticides in their homes and the function of insecticides in producing the nation's food and fiber. She outlined the provisions of the Federal Insecticide, Fungicide, and Rodenticide Act, as a valuable and necessary signpost in guiding the marketer of a new insecticide.

• **CSMA Meeting Report—A Detailed Summary of All of the Papers at the Symposium on Quality Control in the Filler's Plant** . . . Pursuing its usual policy of giving its readers a complete summary of the aerosol technical papers presented at the twice-yearly CSMA conventions, **Aerosol Age** on page 24 begins six consecutive pages on the papers concerned with all areas of quality control necessary in the filler's plant. Of special interest to custom fillers in this feature is a paper by T. S. Harrison of Lehn & Fink outlining a new approach to quality control for the custom filler.

• **Seymour of Sycamore** . . . One of the most enterprising of the aerosol paint marketers and product developers receives the chief editorial attention of this magazine on page 20. The thoughts of Edward Seymour, founder and president, are expressed on the development of new products, marketing techniques, and the future market for pressurized paints.

• **British Executive Explains His Company's Four Aerosol Awards** . . . In the wake of one of the most impressive victories in recent aerosol package contests, Geoffrey Kean, of Durazone (Sales) Ltd., is interviewed (on page 33) to find out his company's marketing and packaging philosophy concerning aerosols.

• **Safca Licenses Metal Box to Make Its Valves** . . . The Safca Group of Aerosol companies holds its annual "congress" and announces a development of importance to the European aerosol industry. Story on Page 39.



In Aerosol Valves . . .

WHAT'S THE MOST VITAL ELEMENT OF SUCCESS?

Spray head, delivery tube, valve body or housing, gasket, ferrule, spring . . . all play a role in the success of an aerosol valve. How they are individually made, and how they are put together as a unit determine their effectiveness. This is where the most vital element of all is brought into play.

Know-how. It's more than a material part. It's experience, craftsmanship and pride in manufacturing the best aerosol valve. An axiom of quality is the greater the know-how, the better the product. When you buy Newman-Green aerosol valves, you're buying the most vital element of all . . . know-how. Try us soon.

NEWMAN-GREEN *Creative Aerosol Valve Engineering*

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BIG NEWS! NOW DELIVERING ONE-PIECE DOUBLE STERILIZED ALUMINUM AEROSOL CANS AT STEEL PRICES OR LOWER!

AVAILABLE IN ¾ OZ. TO 16 OZ. SIZES

NO SEAMS at the top, bottom or sides to collect dust, dirt or corrosion . . . no side seams to rust, leak or come apart. VICTOR containers are *EXTRUDED,* all *ONE PIECE.*

ALUMINUM, the magic metal that makes your Aerosol container a superior one, because Aluminum is practically defect free, light, strong, easily formed into any size or shape.

LIGHTER WEIGHT to make shipping less expensive, handling easier, storing higher, lighter weight filled for easy mass displaying on counters, in stores, in show windows.

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ONLY VICTOR'S EXCLUSIVE PROCESS STERILIZES EACH CAN TWICE; The Second Sterilization Is Done Just Before Packing To Provide The Maximum In Sanitary Protection

EXPERIENCE? *More than 200,000,000 aluminum containers a year for more than 30 years, for the finest brands in the world.*

UNITED STATES CAN CORPORATION

Subsidiary of VICTOR METAL PRODUCTS CORPORATION, Newport, Arkansas

Fairfield Facts

SAFETY, SYNERGISM AND SALES APPEAL
THAT'S BUTOXIDE!!

The most extensive laboratory and field tests ever conducted on an insecticide by any company proved piperonyl butoxide's unique low order of toxicity which resulted in tolerances and official clearances not yet given to any other insecticide and its use with pyrethrins. Rats were fed piperonyl butoxide with all the food that they consumed from time of weaning through the normal lifespan and through three successive generations. Amount of chemical (right) is mixed with rat's weekly food ration contained in glass beaker.

TESTS PROVE BUTOXIDE'S LOW TOXICITY

Years of testing insecticide chemicals in Fairfield's research laboratories prove butoxide's unique low toxicity.

In addition, chronic feeding studies were conducted with rats, dogs, goats and monkeys. Cattle were sprayed twice daily throughout the season with butoxide and pyrethrins for four years. Not a trace of butoxide appeared in samples of the cattle's muscle, fat or milk. This resulted in clearance for use of butoxide and pyrethrins on dairy animals.

Laboratory tests made 14 years ago showed DDT's oral LD50 for rats is 200 mg/kg. At the same time the oral LD50 of undiluted piperonyl butoxide for rats was found to be approximately 8,750 mg/kg. Thus, towards rats, Fairfield's butoxide was only 1/43rd as toxic as DDT. By the time the toxicological studies were completed, it was found that the MLD50 for butoxide greatly exceeded the earlier reports. More recent work completed on chronic tests with piperonyl butoxide, completely satisfied the federal regulatory authority for their tolerances and clearances. At the present time all tolerances are based on chronic feeding tests.

For the formulator and manufacturer, Fairfield's butoxide, thus, plays an important role in producing insecticides with greater safety and salability... whether they are products for home, farm or industry. Consult your local Fairfield representative for further information or write today to Fairfield sales headquarters.

Fairfield Development Boosts Insecticide Performance

Butoxide, the best known and the most famous of all insecticide synergists, is a Fairfield research development. It gives insecticide formulators and manufacturers a more effective product...and it saves them money.

Piperonyl butoxide has the unique ability of tremendously increasing the insect killing power of certain chemicals.

For example, 0.125% by wt. of pyrethrins—though seldom used alone today—when applied against houseflies has a mortality of 43%. Cost is approximately $0.07 per pound.

But then add Fairfield's piperonyl butoxide and see what happens. A combination of 0.03% pyrethrins and 0.25% piperonyl butoxide applied against houseflies produces a striking 82% mortality. Cost of the butoxide and pyrethrins combination is $0.03 per pound. Quite a difference in both effectiveness and in price—*doubled performance at half the cost!*

The surging increase in effectiveness is the result of synergism, an action that takes place inside the insect's body. It produces the remarkable kill required in a popular, fast-selling insecticide.

There are other advantages too. Piperonyl butoxide is not only stable, but it acts as a stabilizer for certain other chemicals by reducing the effects of light, air and heat. It screens out deteriorating ultra-violet rays, thus, prevents deterioration of pyrethrins.

And because it is an acid acceptor, it retards decomposition and polymerization of pyrethrum. Since butoxide is also a solvent, it generally makes the addition of other solvents unnecessary —an important consideration when an odor-free product is desired.

And butoxide's synergizer-stabilizer role applies whether the chemical is pyrethrins, allethrin or rotenone.

What this all means is that butoxide puts greater effectiveness into a product and makes it last longer—on the shelf and after it has been applied by the user.

Putting Ideas to Work

FOOD MACHINERY AND CHEMICAL CORPORATION

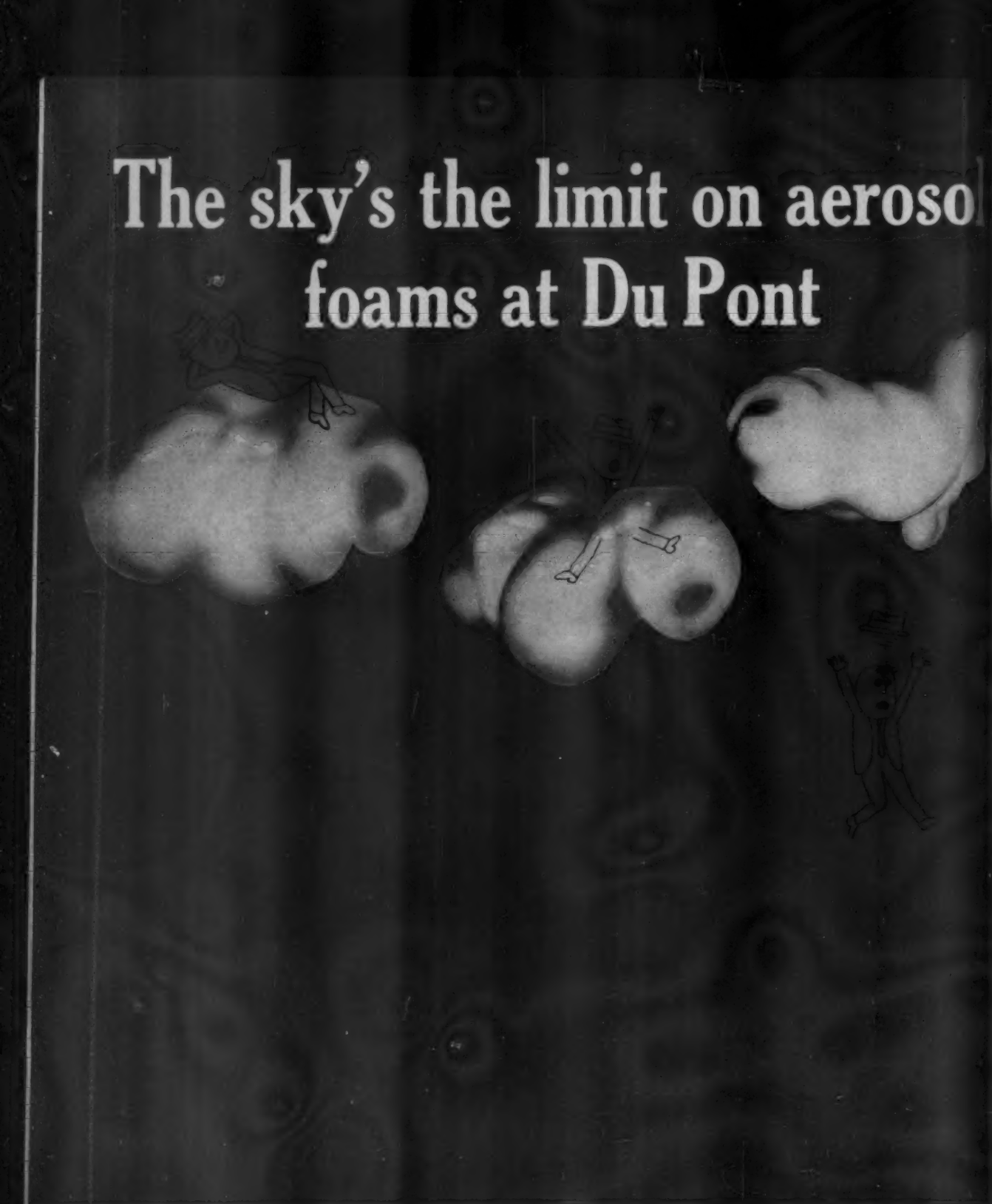
Fairfield Chemicals

Sales Headquarters

441 LEXINGTON AVENUE, NEW YORK 17, N. Y.

Branches in principal cities. In Canada: Natural Products Corporation, Montreal and Toronto.

The sky's the limit on aeroso foams at Du Pont



HIGH STABILITY FOAMS
This is the stiffest branch of the Du Pont foam family. It includes a host of cousins with varying degrees of both stability and density. Ideal for shaving lather, rug and upholstery shampoos.

LOW DENSITY FOAMS
Members of this group are limber and highly workable—the kind you can rub in effectively and wipe off easily. They can sustain high detergency—make excellent dog shampoos, for example.

PRESSURE-SENSITIVE FOAMS
These foams collapse quickly wh worked, leaving your product to the job intended. They carry hig wettability, perform wonderfully we with anti-fog formulations, gla cleaners and pre-shave lotions.

Foams of the future are born at Du Pont. And Du Pont's family of aerosol foams has grown into the largest and most varied—with new members constantly being added. Many of these foams have already been happily married to a tremendous number of successful products. If there's a foam in the future of your product, a foam with special physical properties, you can find it at Du Pont. Ask your "Freon" representative about the greatest collection of foams and aerosol-product information available.

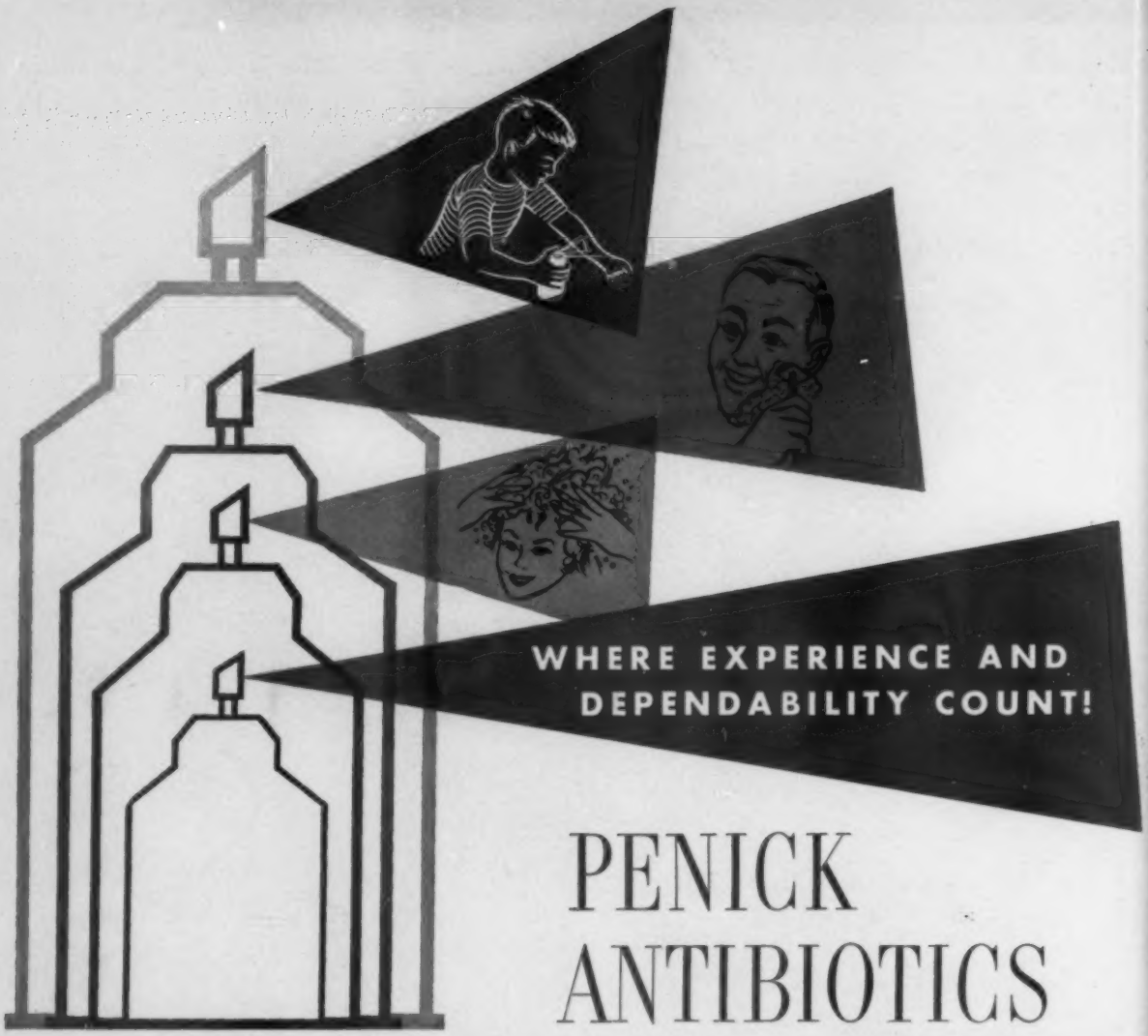
QUICK-BREAKING FOAMS
Disappearing specialists, these are the "now-you-see-it, now-you-don't" foams. They break quickly upon application, provide exceptional wetting and ease of application, are perfect for such uses as hair preparations.

NON-AQUEOUS FOAMS
Newest and most versatile family members, these foams are based on polyhydric alcohols instead of water. They offer wide variation of stability, density and wettability. Applications? Virtually unlimited.

For more information on how Du Pont "Freon" laboratories will assist you in formulating the ideal foam for your product, write to: E. I. du Pont de Nemours & Co. (Inc.), "Freon" Products Div., N-2420AA, Wilmington 98, Delaware.

Best-selling aerosols are powered with **FREON®** propellents

Better Things for Better Living . . . *through Chemistry* DU PONT



PENICK ANTIBIOTICS

help new aerosol products grow

Interest continues to increase in aerosol packaging of pharmaceutical and cosmetic preparations incorporating antibiotics.

As leading suppliers of "special use" antibiotics, Penick is in an ideal position to help you participate in this growing market. Penick's tyrothricin, gramicidin, bacitracin, neomycin sulfate, neomycin palmitate, and other neomycin derivatives can pack new value and sales appeal into a wide variety of aerosols. Examples of products: spray bandages, anesthetics, shaving creams, antiseptics, skin creams and shampoos.

Our technical staff can supply experimental samples, suggest applications, offer starting formulations, recommend propellants, and coordinate stability tests for you. Inquiries will be discussed in strict confidence.

PENICK

NYQ *Chemical Division*

S. B. PENICK & COMPANY · 100 CHURCH ST., NEW YORK 8 · 735 W. DIVISION ST., CHICAGO 10

NEW combination wins rapid acceptance

STERLING "SNAP-ON" single-shell OVERCAP*

and

CANCO "SNAP-LOCK" (PATENT APPLIED FOR) PRESSURE CAN

Aerosol Package Buyers, in varied product-fields, have quickly recognized the practical benefits of the new Sterling **single-shell** Overcap. Proof is the ever-growing list of orders for American Can Company's "Snap-Lock" pressure can with Sterling's "Snap-On" **single-shell** Overcap.

*U.S. and foreign patents applied for by Sterling Seal Co., Erie, Pa.

- ***Single-shell design cuts costs***
- ***Snap-on feature protects valve and contents***

1. Flat top simplifies stacking.
2. Overcap available in exact color match like "Plasti-Kote" cap, may be coated, or multi-color printed with any message and design.
3. Plastic tamper-proof band ends casual sampling and cap switching. Protects product from packaging line to consumer.

Ask Us How "SNAP-ON" Cuts Your Costs and Adds Package Sales-Appeal . . .

STERLING SEAL company
Erie, Pennsylvania

World's Largest Producers of Aerosol Caps and Closures.

The Perfect Container doesn't Just Happen!

You can't blame Baby Kangaroo for being hopped up about his mother's container. Crib, carriage and nursery all in one, the Kangaroo's pouch is certainly a container that does what it is supposed to do . . . best!

In the dynamic aerosol industry Canco containers do what they are supposed to do . . . best! Today, Canco offers aerosol packers broad technical experience and a complete selection of metal containers. You can be sure that the great pressure containers to come will come from Canco.

To increase your sales and profits, put Canco's aggressive team of research, manufacturing and marketing experts to work on your aerosol packaging problems.

GREAT CONTAINER IDEAS COME FROM CANCO

CANCO DIVISION
AMERICAN CAN COMPANY

HOW MUCH DOES A CONSUMER COMPLAINT COST?

A LITTLE CARE IN THE CHOICE OF YOUR SUPPLIER WILL GO FAR IN CUTTING COMPLAINTS AND REJECTS.

That's why Precision Valve Corporation takes a lot of care in processing their valves . . . quality controls at every step of the way reduce the chances of rejects to a minimum, and continuing research reduces the minimum.

Take care... take Precision Valves for your aerosol products.

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700 Nepperhan Avenue, Yonkers, N.Y.

EDITORIALS

Hazardous or *Not* Hazardous? . . .

EVERY time a major piece of business legislation is passed (or a new traffic law enacted), it is human nature to think of it in terms of: "Oh well, it doesn't really apply to me, so I won't worry about it." This attitude is surprisingly common in American business, particularly among small businessmen who may not have the counsel of bright young legal staffs or smart corporation lawyers.

Since July 12 of last year (when President Eisenhower signed the Federal Hazardous Substances Labeling Law) the aerosol industry has had ample opportunity to examine the labels of its products for compliance with the many provisions of the law. Concise articles on the meaning of the legislation have appeared in this magazine ("The Hazardous Substances Labeling Law and the Aerosol Marketer," by Robert Ackerly in the October issue) and a number of other trade publications. The wide scope of the bill, and what might be its immediate effects on the marketing of household products, have been stressed by speakers at the conventions of the Chemical Specialties Manufacturers Association and other industry groups.

But in spite of this advance warning — and continuing educational efforts by industry trade associations—there is valid evidence that a good many marketers of aerosol products are not yet ready to comply with the law. This situation prevails despite the fact that the penalty and condemnation provisions of the act become fully effective on the 12th of January.

At this late stage of the proceedings, what can the aerosol marketer do to protect himself against condemnation and seizure of his products, payment of a fine, or worse? Obviously, his first move should be to sit down with his labels and a complete text of the law in order to revise his labels to bring them into compliance with the law. Although the law is wisely phrased in relatively understandable language, confusion about any point can be readily checked with an attorney or with local representatives of the Federal Department of Health, Education, & Welfare.

Any determination of whether or not a particular product comes under the jurisdiction of the law should be governed by an early understanding that it does *not* apply to products already subject to the Federal Insecticide, Fungicide, and Rodenticide Act, or to foods, drugs, and cosmetics subject to the Federal Food, Drug, and Cosmetic Act. In simpler terms, this means that if your product is already covered by either of these earlier laws, it will not be necessary to review the label.

The germ of the new bill is covered in a paragraph which defines hazardous substance as "any substance or mixture of substances which is (1) toxic, (2) corrosive, (3) an irritant (4) a strong sensitizer, (5) flammable, or (6) generates pressure through decomposition, heat or other means, if such a substance or mixture of substances may cause substantial personal injury or substantial illness during or as a proximate result of any customary handling or use, including foreseeable ingestion by children."

With the exception of the somewhat ambiguous phrase "substantial injury or illness," this paragraph of the bill is straightforward and easy to understand. Obviously, the FDA's interpretation of "substantial" is the key to the enforcement of the bill. By inference, at least, the

(*Continued on Page 76*)

Seymour of Sycamore

Development of an agitator, a good commercial product, and continuing research to improve the product brings success to this aerosol paint pioneer.

MAJOR breakthroughs in the paint end of the booming aerosol industry have become almost commonplace for Seymour of Sycamore, Inc., Sycamore, Ill.

Back in 1949, Seymour became the first manufacturer in history* to successfully load and market pigmented coatings in aerosol containers. The breakthrough came after Seymour had successfully designed (and later patented) an agitator that really worked, thus providing an efficient way to stir paint in a sealed spray can.

Currently, Seymour has just introduced what are described as "the world's first instant-drying alkyd enamels" in aerosol containers. These enamels, offered in 28 colors, have the fast-drying feature of lacquers *plus* the high gloss and durability of enamel, and dry dust- and tack-free in about five minutes, compared to the four- to six-hour drying time for other enamels. For the consumer this means a second coat of enamel can be applied in about 10 minutes, if needed, with no chance, such as that encountered with lacquers, of "lifting" sub-coatings.

The introduction of the quick-drying alkyd enamels is, according to the company, the "first major breakthrough since the spray paint container originally was introduced." Although just brought to the market in August, Seymour reported that September, not normally an especially busy month for spray paints, was the largest month in the company's history!

Backing up the introduction of this new line of quick-drying enamels is a sales organization that today distributes a line of 136 products in 50 states through 21 manufacturers' representatives and in 15 foreign countries through the firm's New York export agent. Distribution is principally through hardware, paint, and automotive supply outlets, in that order. Total Seymour sales volume is about 50% consumer purchases, with the balance divided among industrial, marine, and forestry uses. The entire line includes the vinylized alkyd enamels, lacquers, rust inhibitive marine enamels (RIME), stains and a line of tree log and lumber marker paints.

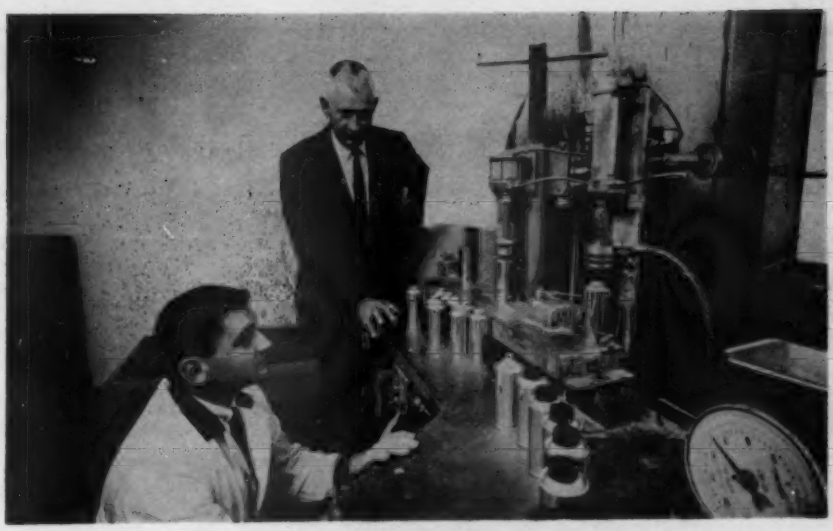
The entire merchandising philosophy has been reduced to its simplest terms for maximum impact on the distributor, dealer and customer: one top quality, one size, one price (the line actually comes in both 11- and 16-ounce sizes, retailing at $1.09 and $1.39, respectively). In addition, the color band is located on the label and not on the cap, where the company management believes it can lead to confusion should caps be accidentally changed by shoppers.

TODAY, Seymour rates itself among the first five in sales volume among the hundreds of brand names in the field. Trade reports indicate that Seymour has about the same share of the market today, with 55 million cans produced in 1959 under some 300 brand names, as it did back in 1953 when some 15 manufacturers produced 15 million cans.

Another point of pride with the company is the stability of the sales force and the factory personnel. A few months ago, at the annual national sales meeting at the Medinah Country Club near Chicago, 21 manufacturers' representatives attended. Of that number all had been with the firm six or more years, and seven agents had been with Seymour since the firm started in 1949. This percentage is also said to exist for the factory force.

Seymour of Sycamore actually began business just 11 years ago. Trained as an engineer, Mississippi-born Edward H. Seymour was "bitten by the aerosol bug" shortly after opening a small aluminum paint manufacturing company in Sycamore, Ill., in 1949. He had left a sales

* Source: DuPont.



President Edward Seymour (standing) checks operation of the company's pilot filling line with Rudolph Albrecht, research director. All of the firm's new products are run here before going into full-scale production.

Most of the company's filling lines are straight line units.

As with most high speed filling lines, the Seymour installations begin with rotary unscramblers which feed the containers onto the main filling lines.

A view of the warehouse area, looking toward the center of the plant. At right is a photograph of part of the shelf testing facilities.

career with United Gilsonite Laboratories, Scranton, Pa., to open his own plant. During the day, he sold his aluminum paint and at night manufactured it. The company office was the Seymour apartment.

After a few months in business, one day Mr. Seymour had occasion to watch his wife spray with "Goodaire."* This inspired the idea that if he could successfully load his paint into such cans he would have a real attention-getter for buyers (and he would also sell a lot more paint).

The beginning moves were made in his small 22- by 32-foot paint factory at 220 Lucas Street in Sycamore. First, he dis-assembled the Goodaire unit to determine exactly how it worked. Next, he tried countless variations of aluminum paint suited to spray can painting, at the same time working toward development of an agitator that would properly disperse the paint. Many people helped. Frank Gill, Continental Can's sales manager, who saw the possibilities, asked Paul Gottshall, Continental's aerosol research head, to cooperate with Seymour. After much laboratory work, and countless trips between the Sycamore plant, 50 miles West of Chicago, and the pilot loading facilities at Continental's labs in Chicago, the breakthrough finally came in May 1949. Mr. Seymour was able to successfully formulate an economically-loadable aluminum paint, and along with it an agitator designed to disperse the paint so it could be sprayed effectively.

At that time there were only three contract packagers in the entire United States, but *none* had ever pressure-packed paint. But successfully loading paint in a spray can in a laboratory was a long way from setting up production, distribution, and merchandising facilities. So Mr. Seymour interested Carl Svendsen, then president of Chase Products in Chicago, in filling for Seymour. Seymour furnished the paint and directed Svendsen on how to fill cans with the proper proportions of propellant and paint. On May 29, 1949, the company's first commercial order and the first in the history of the industry—some 10,000 spray cans of pigmented coating—were shipped by Seymour.

Based on encouraging orders, Mr. Seymour moved rapidly to set up a distribution network. Within three months, he had national distribution through manufacturers' agents, and sales went from zero to $250,000 in 1949, the company's first year in business.

Following this lead, other manufacturers soon brought out a few colors but these first spray cans developed a number of shortcomings: valves and agitators did not function properly and the paint consistency was incorrect as it did not atomize properly. Rather than hurriedly introduce colors, Mr. Seymour's firm conducted detailed research from 1949 until late in 1951, when the company finally introduced eight basic colors to the trade.

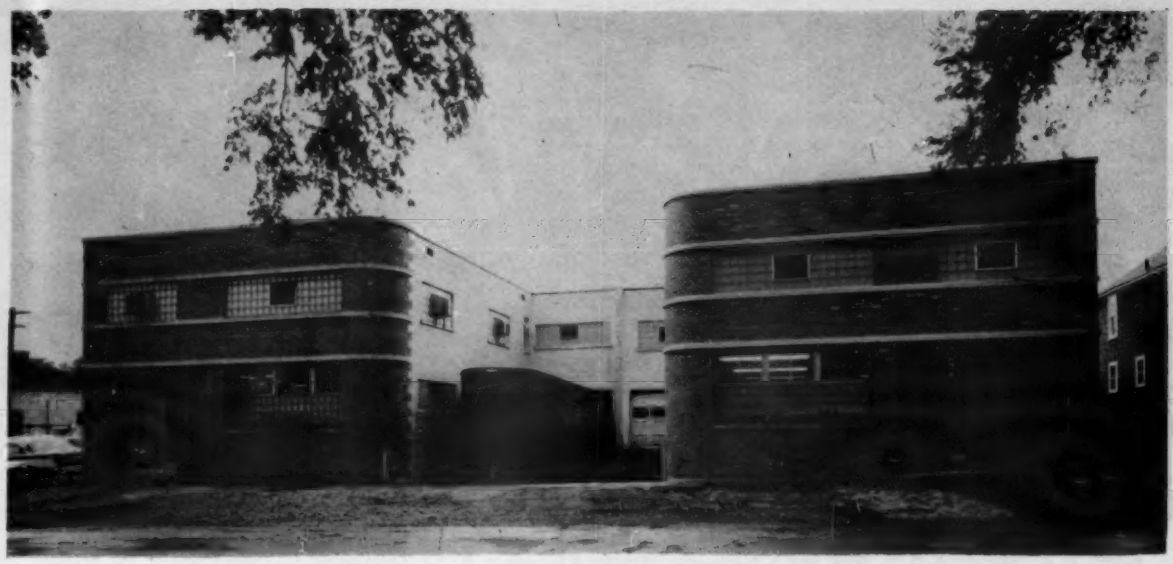
During those years, Mr. Seymour had continued to improve his agitator, even then probably superior to any on the market. The Seymour agitator, finally patented on Christmas Day, 1951, was designed so as to get to the bottom of the can to redisperse pigments properly for more uniform coatings and less waste.

TODAY, the Seymour plant ranks with the most modern in the paint end of the industry. From the tiny, 600-square-foot plant where the firm began, numerous additions over the years, in accordance with a master plan, have brought today's plant to an area of 23,000 square feet. Currently, the firm's loading lines have a capacity of 4,000 cans an hour, but the plant has been so designed that production can be doubled or tripled without any further space additions.

Raw materials storage is in five underground tanks, with a total capacity of 30,000 gallons, and access pipes lead from the tanks directly into the mixing rooms. Recently installed to increase capacity was a new 5,000-gallon resin tank and a 60,000-pound capacity propellant storage tank, both located outside at the rear of the plant for convenient truck unloading.

Pivot of the Seymour plant is the

* Then a product of Bridgeport Brass Co.



Front view of Seymour plant. Loading docks are in the center, and offices are at left.

well-equipped research and quality control laboratory, from whence have come many aerosol paint innovations. It was in this laboratory that, after several years of research, the new vinylized, instant-drying alkyd enamels were developed by research director Rudolph Albrecht.

What exactly is different about the new vinylized, quick-drying enamels? Mr. Albrecht explains that alkyd resins are durable, but properly modified with oil, they are slow-drying. "Vinyl itself is highly durable and fast-drying. Our research disclosed that an alkyd resin, properly modified with oil, then *again* modified with vinyl, became imparted with additional durability and gloss, as well as quick-drying characteristics. The result is the new line of fast-drying enamels."

The Seymour laboratory also is in charge of a highly exacting quality control procedure. Quality control in most plants, Mr. Albrecht said, usually means a spot check of the product at intervals to determine if production standards are being met. "If standards are not being met, production is stopped and the difficulty located. The trouble is: how much sub-standard production got by before the faulty product or component was discovered?"

At Seymour, he said, the conception of quality control is used through every step of the process, from the raw materials through the finished product. Even the company's inventory records, he added, provide them with a measure of quality control. "Based on production figures, if use of raw materials is out of line in relation to the formulation, we immediately know that a close check is in order." He said the firm does not wait for this to happen, but that it is another double-check on quality control.

Closely allied to production and quality control is Seymour's pilot plant operation, believed to be possibly the only one in the aerosol paint field. Here small test runs are staged under actual production conditions, prior to full-scale production. This enables the firm to perfect formulations economically *prior* to full-scale

(*Continued on Page* 59)

The spray booth in the Seymour laboratory has become essential in checking and observing the spray characteristics of paints.

Top: Tony Iannacone (Fluid Chem.), Sandy Craige (Peerless Tube), Earl Graham (Clayton), and Gordon Gilroy (Precision Valve), E. A. Schwoeppe, H. V. Meek and A. Garavaglia (Procter & Gamble), R. G. Appenzeller (G. Barr) and J. N. Michell (Walter Frank); Bill Brosie and Charles Beach (Stalfort) and Fred Lodes (Lodes Aerosol Consultants). *Bottom*: Victor DiGiacomo (Givaudan-Delawanna), Jim Gottlieb (JG Machine) and John Lyons (Dodge & Olcott); E. D. Giggard (Continental Can), and H. K. Rosenbaum (LaMaur) and Lloyd Flanner and S. J. Muller (Gen. Chem.); Jack Schlossman (Aerosol Research), Dick Reavey (Breck), Fred Presant (Aerosol Techniques) and Otto Weil (Aerosol Research).

CSMA Meeting Report

Quality Control Called Determinant in Installation of Captive Lines

EFFECTIVENESS of quality control in the custom filler's plant is one of the principal factors governing whether or not the marketer installs his own filling line, T. S. Harrison, new products manager of Lehn & Fink Products Co., Bloomfield, N. J., said in his address on "The Kind of Quality Control a Manufacturer Would Like to See From His Aerosol Loader." Ranking effectiveness of quality control just behind cost, Mr. Harrison chided custom fillers on their "unrealistic approach" to custom filling. Mr. Harrison was one of nine speakers making up a Symposium on "Quality Control in the Filler's Plant," at the CSMA Meeting in Florida on Dec. 7.

"It appears to me that at present 'satisfactory' quality control is the passing of certain rather sterile numerical specifications: how much the can weighs, how much pressure it has, whether the spray pattern is of certain size and shape. These specifications, and many others written by the sellers' technical people, certainly are intended to ensure product quality. But, do they actually? From a marketer's viewpoint, *I don't think they do.* Rather, they seem to be hurdles to be cleared so that the filler will be paid for his work. This is certainly not an objective approach."

Mr. Harrison cited the example of a company which researches, formulates, purchases, packages, ships, and sells its own products. He said in such a company there develops a "feel" for products and how they will be received on the consumer market. This he termed a "marketing philosophy," and said one point of contention has been that the production and quality control people of the aerosol loader are not acquainted with this outlook.

He suggested that "First, the loaders should become acquainted with the product manager or marketing man and learn from him how he plans to sell the aerosol product. There is a common belief that the marketing people are totally inaccessible; that all contacts must be with the purchasing group. In some cases, this is undoubtedly true and is unfortunate. In my experience, however, an *objective* approach by the representative of the aerosol loader, a real desire on his part to learn more about the product he ultimately will be asked to produce, is looked

(*Continued on Page* 71)

Valve Suppliers Praised for Product Quality

"VALVE suppliers have done an extremely fine job of providing us with good quality valves, declared Norbert H. Brusky, of S. C. Johnson & Son, Inc., Racine, Wis., in a paper that was also part of the panel discussion on "Quality Control in the Filler's Plant." Continuing his praise of the valve maker, he said: "It is amazing that a tiny intricate mechanism, as is the modern aerosol valve, can be mass-produced with such uniformity and freedom from defects, and yet at such low cost. I am sure that valve manufacturers are using and are realizing the benefits from good quality control procedures."

Despite this, Mr. Brusky said, it is necessary that valve quality control be watched closely by the filler. He divided his discussion into the areas of incoming valve inspection, visual inspection, detailed examination, filling line quality control, and quality follow up.

For the first of these he suggested the first check should be that the valve is the one fully described in an agreed-upon specification. "Nothing makes for a bigger fiasco than your vender giving you one valve when you want another. When a shipment of valves arrives, check the descriptive data on the outside of the cartons to make sure this agrees with your specification and that there are no 'odd-balls' in the lot. Examine the cartons for damage, evidence of entry, loss of contents, and the like."

At this point Mr. Brusky suggested that the valve manufacturers reexamine some of their packaging, particularly regarding outer cartons which he said are often not structurally strong enough to stand the gaff of transportation and warehouse stacking. He advised that needless advertising message and identification of maker should give way to more legible identification of what valves are packaged.

He reported that his company samples all cartons for a shipment of from one to five cartons, seven in from six to 15 cartons, ten in from 16-65, 15 in 65-110, 25 in from 11-180, and 35 in from 181 to 300. "One sampling of each carton consists of first examining 50 valves for those things which can be observed visually and then taking a sample of five for a more detailed examination."

The detailed examination he outlined as follows:

"Button or actuator

1. Orifice diameter—we use a 3-0 microscope which has a grid marked in it to make this measurement. We prefer this to sizing with drills because we are able to examine the hole for 'out-of-roundess,' flash, etc., at the same time.
2. Internal chambers—section the button and with a magnifier

(*Continued on Page* 70)

Charles Beach Elected CSMA President

CHARLES E. BEACH, of John C. Stalfort & Sons, Inc., Baltimore, was elected president of the Chemical Specialties Manufacturers Association at the association's 47th annual meeting, held at the Hollywood Beach Hotel, Hollywood, Fla., Dec. 5-8. Other officers elected were:

Charles E. Allerdice, Jr., The Bell Co., Chicago, first vice-president; Donald J. Templeton, Stanley Home Products, Inc., Easthampton, Mass., second vice-president; Frederick G. Lodes, Lodes Aerosol Consultants, Inc., New York, treasurer; and Alfred A. Mulliken, C.S.M.A., secretary.

Elected to the Board of Governors for three-year terms were George W. Fiero, Esso Standard Div., Humble Oil & Refining Co., New York; John A. Rodda, Fairfield Chemical Div., Food Machinery & Chemical Corp., New York, and Joseph J. Tomlinson, General Chemical Division, Allied Chemical Corp., New York.

Mr. Beach graduated from Ohio University in 1933 with a B.A. Degree in business economics and accounting. He started his business career as a salesman for General Foods Co., then joined General Motors Acceptance Corp., and, later, Maryland Credit Finance Co.

After a three-year stint with the Navy during World War II, from which he was discharged with the rank of lieutenant in 1946, he joined the Stalfort sales force. In 1949, he became vice-president and general manager of the John C. Stalfort & Sons Co., Inc. and, when the Stalfort Pressure-Pak Co. was formed the same year, he was named its president.★

Top: Marv Meirowitz (Gen. Chem.) and Jack Wittke (Oil Equipment); Bob Killifer (Union Carbide), Roy Ferry (Schrader), D. B. Peck (Fuller Brush) and George Macura (VCA); Bill Wellman (Colgate), John Buchanan (Cont. Can) and Walter Beard (Risdon). *Bottom*: Gordon Lang (Conn. Chem. of Canada), Joe Gregory (Newman-Green) and Marv Bienvenu (Aerosol Corp. of the South); Norman Odell (Norman Odell Assoc.), Joe Tomlinson (Gen. Chem.), Bob McDonald (Norman Odell Assoc.) and Earl Graham (Clayton). Seth Schenible (Crown Can) and Bill Brosie (Stalfort).

CSMA Meeting Report

Product Standards Termed Essential in Quality Control

S. JACK CAMPBELL, of Continental Filling Corp., Danville Ill. declared that any successful quality control program must take into consideration first what the desirable and undesirable characteristics of the product are, and with this knowledge provide tests by which they can be measured. He spoke on "Quality Control for Aerosol Concentrates, Line Filling, Weighing, Water Bath, and Spray Testing."

For the concentrate, he suggested that specific gravity be one of the first tests considered for liquid raw materials, as well as for concentrates involving a combination of two or more liquids. "The aerosol package," he pointed out, "has made it necessary to develop some special tests in order to determine the specific gravity of the total liquid in an aerosol dispenser by one of at least two methods: either the contents of the dispenser may be cooled below the boiling point of the liquid, usually to the boiling point of propellant 12 or —21.6°F., and the resultant specific gravity determined at this low temperature, or the contents of the dispenser may be transferred into an elongated pressure tube containing an appropriate hydrometer and the temperature adjusted to standard conditions and the resultant specific gravity determined by hydrometer.

Some of the other tests he recommended for the concentrate were refractive index, distillation range, odor evaluation, clarity evaluation, moisture determination, solids content, flashpoint, colormetric determination, pH determinations, aniline point, acid number, chlorine content, viscosity, and chromatography. He said that where a special product is involved, additional and perhaps special tests might be necessary.

For production line filling, Mr. Campbell listed dispenser pressure determination, dispensing delivery rate, flammability tests by flame projection, drum and open cup tests, composition of head-space vapors by gas chromatography as a check on purging, and an inspection of the filling operation for cleanliness, spillage, splatter, and a visual inspection of the package for dents, scratches, and other physical flaws. "The weighing operation," he said, "is of *major* significance, particularly when the product contains expensive materials. It is essential that an acceptable statistical control method be used to determine the accuracy of the filling machine. To appropriately perform this operation, it is necessary that proper weighing apparatus be involved. For speed and accuracy, an automatic balance with an accuracy better than plus or minus 0.1 grams is recommended. It must be recognized that the empty cans will vary

(*Continued on Page 69*)

CSMA Meeting Report

Supplier-Customer Agreement Called Quality Control "Must"

"ANY GOOD quality control program should begin with meetings between the supplier and customer to set up the limits of acceptance that will be agreeable to both parties." Thus Russell P. McGhie, of the Colgate-Palmolive Co., New York, summed up in his paper on "Quality Control of Aerosol Containers." Mr. McGhie cautioned that the supplier "cannot provide containers of a quality greater than the capabilities of his line, without an inspection system at the end of his line which is costly to both parties and still does not insure uniform quality.

"Therefore, the filler has to sometimes agree to limits of acceptance that are wider than he desires, for there usually has to be a compromise between supplier and filler on cost vs. quality. On dimensions and capacity, plus and minus tolerances should be set up and a method of measurement agreed upon. This needs to be done, only, on the dimensions which are critical to the filler, such as capacity, overall height, outside diameter, and the opening. The capacity is usually checked by overflow measurement and is much more subject to variance in glass containers, due to their method of manufacture, than in metal containers. Other factors such as strength and durability are usually beyond the scope of testing by the filler and are only found during the production run. Leakers are the main cause for worry, and the more beads or seams there are, the more chances there are for a leaker. Naturally, in this instance, glass is better than metal. Leakers can become costly to the filler, if they are excessive, as he loses the product already in the container or has to use a salvage operation to reclaim the product at added expense. However, if it is deemed necessary to check these points, tests and limits can be agreed upon and set up with the supplier."

Mr. McGhie suggested that statistical sampling of incoming container shipments is one good method of checking these shortcomings. He also pointed out that the supplier can pre-sample before shipment and then run the sample through a production line for checking.

Turning to the all-important exterior appearance of the container, Mr. McGhie declared that color standards should be set up and reported that his company uses a color spectrophotometer as a reference

(*Continued on Page* 69)

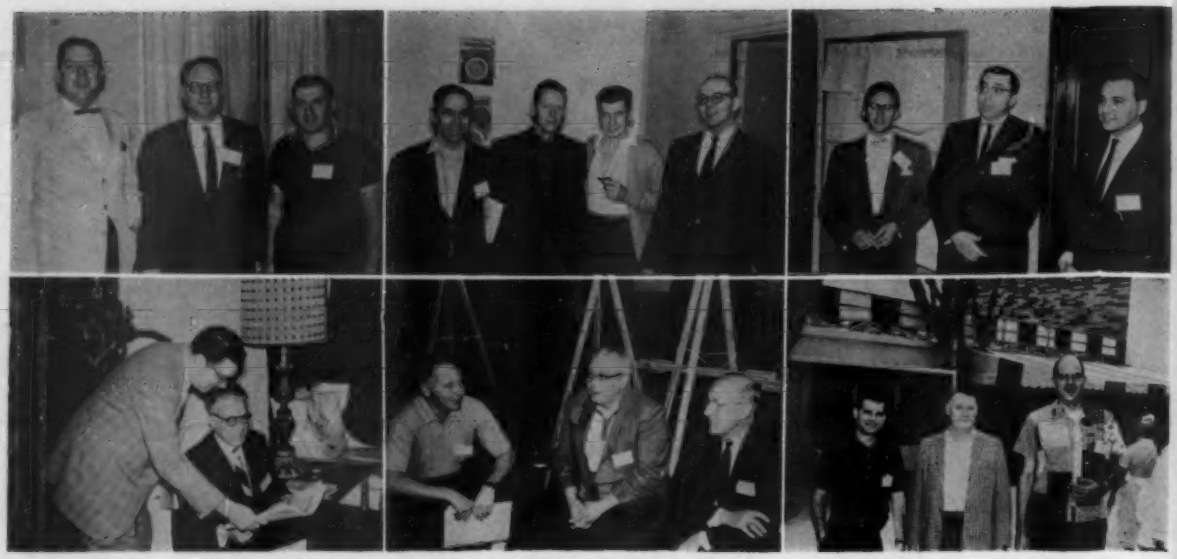
Spectrophotometer Termed "Most Valuable" Tool

INFRA-RED spectrophotometery can be a most valuable tool in quality control in the filling plant, Dr. Daniel H. Terry, of the Boyle-Midway Division of American Home Products Corp., Cranford, N. J. told the Aerosol Division session on quality control. Even the lower-priced spectrophotometers, he indicated, offer accurate enough data to be of real value to the aerosol filler.

Dr. Terry called the device a "great time saver," and predicted it will become one of the most valuable tools for quality control work. He said his company has found it especially useful for testing insecticidal compounds, in order to give quick analysis for verifying ingredient listings required by Federal insecticide regulations. Product samples, he said, are held and rechecked for a period of seven years.

At the laboratories of Boyle-Midway, he said, the device is used to give comparisons of the product tested against a specially selected sample. Key wave lengths are assigned for each constituent, and both beams of the spectrophotometer are used. By use of this method, he reported, insecticide formulations containing as many as four toxicant constituents can be tested.★

Panelists on the quality control panel at the Aerosol Division meeting included George Barr (G. Barr), the moderator, Dan Terry (Boyle-Midway), John Armstrong (Armstrong Labs), Fred Presant (ATI), Jack Campbell (Continental Filling), Donald Dean (Shulton), Russ McGhie (Colgate-Palmolive), T. S. Harrison (Lehn & Fink), Norbert Brusky (S. C. Johnson) and E. K. Kitow (G. Barr).



Top: Bob Allen (Wheaton), Fred Taylor (Lehn & Fink), Paul Silverman (Helene Curtis); Don Tuttle (Risdon), Ray Shinn (Crown Can), Tony Hersh (Boyle-Midway), Fred Presant (ATI); Gus DeVera (Fluid Chem.), George Macura (VCA) and Tony Iannacone (Fluid). *Bottom*: Alfred Herzka (Pressurized Packaging Consultants) and M. Auzepy (Safca France); Gus Lawrence (DuPont), C. F. Kessler (Plastic-Kote, Inc.) and Charles Wirth (DuPont). Dick Harwick (Pace Inc.), Dick Monahon (Oil Equipment) and Larry Hall (DuPont).

CSMA Meeting Report

Propellant Control Said to be Eased by Suppliers' Competition

THE HIGHLY competitive situation among the four major suppliers of fluorinated hydrocarbons works to the advantage of the aerosol filler through maintenance of consistent high quality standards, Donald E. Dean, of Shulton, Inc., Clifton, N. J., told the Quality Control Symposium in his paper on "Quality Control of Propellants and Propellant Systems." "In fact," he continued, "by obtaining the producer's full analysis of each shipment, the filler may reduce his sampling program to a shipment spot-check system. The interval between checks will be dependent upon the filler's confidence in his supplier."

Mr. Dean declared that "at least four quality checks" should be considered for incoming propellant deliveries: (1) identification and/or composition; (2) presence of free chloride; (3) moisture content; and (4) presence of non condensible gases.

The first of these he termed the most important. "A measure of the total pressure at 70°F. offers a rapid means of identity of propellants either by themselves or in two component propellant mixtures. Pressure vs. composition tables and charts are available from the various manufacturers. A range of plus or minus 1 pound from the value listed for a given mixture is a suitable specification. For the most commonly used mixtures such as propellant 11 with propellant 12 and propellant 114 and 12, this will maintain quality within approximately 2% of the stated composition. Other physical characteristics such as specific gravity or density measurements may also be utilized as a composition test. However, the techniques and apparatus required for high vapor pressure liquids are cumbersome and difficult to handle. They offer *no* advantage over pressure measurements."

Vapor phase chromatography, Mr.

(*Continued on Page* 68)

Food Quality Control Requires Specifications

QUALITY control for food aerosols is similar to other quality control procedures in that it must have specifications to guide it, C. P. Clapp, vice-president of Western Filling Corp., Los Angeles, Calif., declared in a paper delivered by Fred Presant of Aerosol Techniques, Inc., Bridgeport.

He too specified that the filler and his supplier must "arrive at an understanding" on what materials will be accepted and which will fall into the reject category. "Parts inspection is statistical and straightforward," he said, "but contamination during sampling and product change with time is a continual problem."

Mr. Clapp emphasized that micro-

(*Continued on Page* 66)

Kitow Reports on Statistical Control in Filling Plant

"IN THIS day of high speed production it is uneconomical and impractical to examine the quality of products by 100% inspection," declared Edwin K. Kitow, of G. Barr & Co., speaking on "The Application of Statistical Quality Control." Application of well-planned and properly supervised statistical control methods, he suggested, can considerably reduce the rework and scraps from the process line.

"Statistical methods, largely based on the theory of probability, have been developed to deal with problems of many different fields of activity, among them aerosol filling. One of the interpretations of statistics refers to a method of collecting, organizing, and interpreting numerical data. The statistical quality control program can be applied when the three forementioned actions are possible. The incoming inspection of packaging components—the weight and dimensional variation of container; spray rate of valves; dimensional variation in solving the mating problem of over-sized caps, are the cases in point. However, there is an old quotation which states that quality must be built into the product and not made, and the control must begin at the individual processor's plants. The underlying statistical quality control methods are applicable to most all vendors' process lines.

". . . The application of statistical quality control in aerosol filling is based on the fundamental and essential tool in statistical quality control; namely, average and range, commonly known as 'Shewart's Control Chart.'

". . . It is convenient to think of all matters related to accuracy of

(*Continued on Page* 66)

Members of the panel on the Hazardous Substances Labeling Act included (from left): George T. Scriba, Dr. Emil Klarmann, W. W. Goodrich, and Robert Ackerly of Cummings, Sellers, Reeves & Conner, who acted as moderator.

Hazard Determination Called Key to Compliance with New Law

THE paramount problem for the marketer in bringing his products into compliance with the Federal Hazardous Substances Labeling Act is inventorying them to determine whether or not they come under the law, declared William W. Goodrich, assistant general counsel of the Food and Drug Administration, at a general session of the CSMA at the association's 47th annual meeting in Hollywood, Florida. Mr. Goodrich represented the Government's point of view in a symposium on the subject which included Dr. Emil G. Klarmann, of Lehn & Fink Products Corp., and George T. Scriba, of Union Carbide Chemicals Co.

Mr. Goodrich cautioned that the law applies to products merchandised in containers suited for household use, but that the do-it-yourself trend has resulted in many products being brought into the home which previously were kept in garages or industrial plants. He advised that the law applies to "foreseeable accidents", and that all persons who deal in hazardous substances are responsible for following the regulations.

"The law specifies," he said, "that the signal word must be located prominently on the label, and must be distinctive as to color, position, type,

(*Continued on Page* 57)

Pharmaceutical Quality Means Closer Limits

THERE are *no* special quality controls peculiar to aerosol pharmaceutical filling, John C. Armstrong, president of Armstrong Laboratories, Inc., West Roxbury, Mass. told the symposium on quality control. He cautioned, however, that there are "quality controls associated with aerosol pharmaceuticals which must be given more emphasis and closer acceptable limits."

For propellants, he pointed out, the filler relies on the manufacturer to maintain consistently high standards. "However, in aerosol pharmaceutical filling, often recorded certification of propellant in single tons and tank load quantities is required by the pharmaceutical manufacturer and the Food and Drug Administration. This may be as simple as vapor pressure

(*Continued on Page* 65)

In the February issue, *Aerosol Age* will carry substantial portions of three papers on banking and finance, given at the CSMA meeting. —The Editor.

CSMA Packaging Contest Draws Large Number of Entries

The photographs on these pages represent most of the entries in the various categories of the CSMA Aerosol Division's Aerosol Contest. On page 33 is a story about the company which won 4 of the 17 awards.★

You have a working partner in aerosols at General Chemical

Sales presentations *. . . an example of service from General Chemical designed to support the business growth of contract fillers*

To help you develop new business, General Chemical makes available its staff of sales, marketing and technical specialists to work with you on sales presentations to prospective aerosol marketers. General has prepared an interesting, informative sales presentation designed for busy executives and will help adapt it to your personalized selling needs. In this way the resources and capabilities of General Chemical support your business growth.

In addition, General Chemical offers these comprehensive services to help you strengthen your position as an aerosol specialist:

Formulating aid—General Chemical maintains laboratories and aerosol specialists to back you up in formulating work for your customers.

Product information bulletins—To help you evaluate formulations and product performance for your customers, General Chemical has compiled data sheets on a large number of new formulations as well as many familiar products developed and studied in its laboratory.

Marketing consultations—General Chemical experts will be glad to assist and advise you on marketing and promotion.

These helpful services are available to contract fillers *free* from General Chemical . . . producer of Genetron® aerosol propellants. The "Genetron" line includes standard propellants and special blends for virtually every type of aerosol product. For full information about how you can take advantage of General's free services, phone or write the General Chemical office nearest you.

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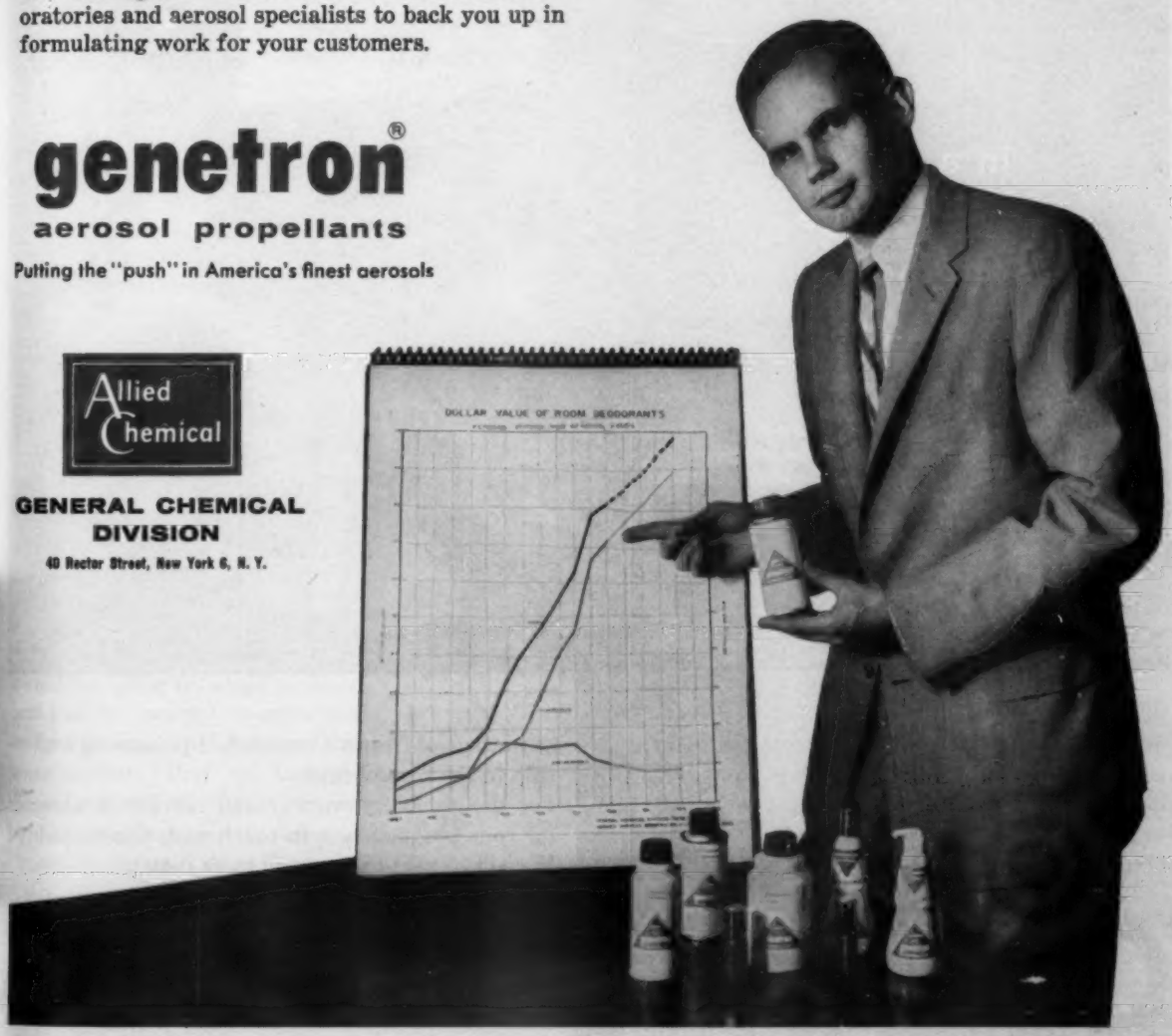

When you count on Crown, you get more than a complete range of aerosol cans. Only Crown makes both seamless and fabricated types. You get the benefit of production facilities greatly expanded to give you faster, better service. And you get the advantage of Crown's unmatched pioneering leadership in the aerosol field.

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CROWN CORK & SEAL CO., INC., 9300 Ashton Rd., Philadelphia 36, Pa.

Geoffrey Kean (right) accepting one of four awards won by Durazone (Sales) from Joseph Tomlinson (of General Chemical) chairman of the CSMA Aerosol Division Contest Committee.

British Executive Explains Company's 4 Aerosol Awards

BECAUSE of its "seniority" in products developed and units produced, the U.S. aerosol industry has developed somewhat of a superiority complex when it comes to a comparison with the pressurized packaging endeavors of other countries. However, last month this superiority complex suffered a somewhat rude shock when Durazone (Sales) Ltd., a British marketer, won a total of four awards in the 1960 Aerosol Package Contest of the Chemical Specialties Manufacturers Association. These four victories, combined with an award in the insecticide category won by Laboratorie Agir (a Safca subsidiary), Paris, France, gave foreign entries a total of five awards out of 17 given by the contest judges.

Durazone's "Sprayclean," a handsome-looking spot remover, was the chief architect of victory in the contest, winning the Grand Award (for the best package in the contest), the award for "other household products" and that for "products manufactured in foreign countries." Another Durazone product, "Dew" air freshener, walked off with the election as outstanding package in the class of "room deodorants."

How can one account for this somewhat stunning coup of a contest that hitherto has been almost entirely dominated by American products in every category? Was it a freak or can similar surprises be expected from Durazone in future contests?

To find out the answers to these questions, and to learn some of the background of this "comer" in aerosol packaging, *Aerosol Age* last month interviewed Geoffrey Kean, the company's marketing director, who came to the U.S. to receive his company's awards and to survey the U.S. aerosol market. The interview was conducted during the CSMA Convention in the lobby of the Hollywood Beach Hotel, in the wake of Durazone's receipt of the four awards.

He revealed that Durazone first introduced an aerosol product on the British market on January 1, 1959. This product introduction, the result of some two years of market study and product development work, was especially contrived to take advantage of what the Durazone management estimated was a high priced market. Such products as room deodorants (in six-ounce containers) were then retailing at the British equivalent of 80 cents U.S. money. Reasoning that it was essential that such a product be more attractively priced for housewife sale, Durazone set the price of its product at 41 cents, roughly half that of competing products.

But how does a new marketer accomplish such a price reduction? Mr. Kean explains that "volume production, resulting in nice long runs," plus

(*Continued on Page* 63)

The four awards won by Durazone, with the "Grand Award" in the lower center position. The "Sprayclean" package at left won three of the prizes, and the "Dew" package the fourth.

SCC, TGA, Meet in New York

cosmetic marketers warned about responsibility for product advertising

COSMETIC marketers were warned that they must assume responsibility for claims made in cosmetic advertising. Speaking to the annual seminar of the Society of Cosmetic Chemists in New York on Nov. 29, Charles A. Sweeney of the Federal Trade Commission's Bureau of Investigation warned that cosmetic scientists should not let advertising agency men "take over" the advertising of their products without consulting them on specific product claims.

Mr. Sweeney, who is legal advisor for radio and television at the bureau, cited the cosmetic industry trade practice rule as a warning about improper claims suggesting French origin for perfumes and cosmetics. He said that Rule No. 3 applies specifically to direct or indirect false representation of the origin or ingredient of any product. "Under this rule the use of any foreign words or phrases, or the use of any other terms, words, symbols or picturizations indicative of foreign origin, which create a false impression with respect to the origin of any industry product, or of any ingredient thereof, or of the container in which an industry product is sold or offered for sale, is to be considered as being among the practices which are inhibited by this rule."

He indicated that one possible area of misunderstanding might lie in a product composed of several ingredients, with one or more of foreign origin. He advised that foreign origin claims should clearly say which of the ingredients were made outside the U.S., and that a statement should be included to say that the product was made, compounded, diluted, mixed, blended, or assembled in the United States.

Dihydroxy acetone, though not always successful as a cosmetic, appears to be of genuine interest to the dermatologist. Dr. Leon Goldman, of the University of Cincinnati College of Medicine, pointed out that the material stains the heavily keratinized areas deeply, and can be used as a tool in studying irregularities in the chemical composition of the human skin. From a cosmetic standpoint, Dr. Goldman admitted, the failure of the material to cover scars is a "serious shortcoming," as is its failure to stain skin affected by various fungus diseases.

He suggested that such shortcomings might be overcome by any one of a number of approaches: (1) increase in the DHA concentration, (2) DHA plus a colorant, (3) DHA plus tannin, (4) DHA plus methoxy storalyn, and (5) some of the analogues of DHA. Varying concentrations of the material, he reported, have revealed no tendency to irritate or sensitize the skin. Despite painting on the skin, there were no significant changes in blood sugar, nor was it possible to induce color in the eyes or mouth. In conclusion, Dr. Goldman suggested that there might be a tremendous opportunity for use of the material in aerosol packages.

Sebum is the fuel for acne, and efforts to treat the condition should be concentrated on the attempt to control sebum production, Dr. John Strauss of the Boston University School of Medicine said. Admitting that scientists don't know exactly what acne is, nor what are its causes, he chided the cosmetic industry for prescribing "peeling agents" for treatment of blackheads, associated with acne.

Sebum is not the sole constituent, he advised, since many people with a high oil output on the skin do not have acne. But the fact that acne

SCC Honors Britain's Dr. Marriott for Chemical Research

Dr. Marriott (right) receives award from H. J. Amsterdam

The Society of Cosmetic Chemists honored Dr. Robert Henry Marriott, F.R.I.C., at its annual dinner-dance on Nov. 29, at the Hotel Biltmore, New York. Dr. Marriott received the Society's 1960 Medal Award for his contribution to chemical research in the cosmetic industry. Acting as master of ceremonies and eulogist for the medalist, Maison G. deNavarre, spoke of the work of Dr. Marriott and reviewed his personal and scientific accomplishments. The presentation of the award was made by H. J. Amsterdam, president of the society. A. Herzka addressed the dinner on behalf of the British Society of Cosmetic Chemists, and expressed that group's appreciation for the honor bestowed on one of its members.

During the evening, Dr. Sophie Plechner was installed as president for 1961, and Warren Dennis was introduced as president-elect for the year 1962. Robert A. Kramer and Lester Conrad were chosen to serve again as secretary and treasurer, respectively, and elected directors included Walter Edman, John Longfellow, William Mueller and Martin Rieger. Serving as chairman of the Society's Executive Committee for 1961 will be Mr. H. J. Amsterdam, the retiring president.

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The Sample Shelf

By Jerome N. Michell
vice president
The Walter Frank Organization
Hillside, Ill.

THE grand prize winner in the 1960 CSMA aerosol packaging competition was a British entry, "Syrayclean," a product of Durazone, Ltd., London. From any standpoint, this design was head and shoulders over any other entry. If I had had the privilege of selecting the entry for second place in the competition, it would have gone to the other entry of the same company. It is "Dew," a room deodorant.

There is a strong message in these two designs for U. S. aerosol marketers. One glance tells the whole story of product identity, brand recognition, use and quality. There is no attempt to cram a full page of print advertising on the package. In the one word, *simplicity*, we can sum up the design superiority of these packages.

"Sprayclean," as its name implies, is a spot remover. The smart design has a black and white wide tweed band at the top, a broader white lower band and the product name in lower case letters in blue and black. One round spot of white is reversed into the tweed and a bright red spot is located just below the white spot in the white band. The attention value of the entire package is first rate and the overall effect "shouts" quality, yet without being blatant.

Similarly, "Dew," with its single lilac drop, blue and lilac bands and reverse white lettering says exactly what it is in a refreshingly, smart, simple manner.

Among the 270 plus entries in the competition were many excellent designs. But the poorly designed packages — carelessly conceived and haphazardly produced — were conspicuous by their number. There were actually *dozens* of packages that were submitted only because they were new in 1960. The judges chose well, but aerosol packages as a class have a long way to go. In the coming months it will be the aim of this corner to pinpoint the design features of aerosol products, both good and bad, and to comment about them frankly and constructively. ★

This column begins a monthly series in *Aerosol Age*. The author, a package designer, will analyze some of the flaws and attributes of aerosol packaging design on newly marketed products.

patients do improve during the summertime suggests that ultra-violet light and other factors can be considered in control of the condition. Efforts toward control of the disease, he said, should be toward eliminating the fuel, sebum. He said topical medication has probably gone as far as it can with present knowledge.

The afternoon session consisted of a symposium on new and improved manufacturing techniques with emphasis on the problems of liaison between laboratory and plant. Drs. Donald M. Skauen and Harold M. Beal of the School of Pharmacy of the University of Connecticut, in their paper "Sonic Emulsification," discussed ultrasonic processing equipment with particular reference to dispersing and emulsifying types.

Dr. J. Y. Oldshue of Mixing Equipment Co., Inc., in "Scale-up Problems with Impeller Types of Fluid Mixers in Cosmetic Processing" discussed mixing equipment in the cosmetic industry and reviewed mixing theory and practice and a basis for the discussion of scale-up.

In "Application of the Twin Shell Mixer in Liquid-solid and Solid-solid Cosmetic Formulations," John J. Fischer of the Patterson Kelley Co., discussed physical problems involved in the blending of various materials in the cosmetic industry.

TGA Meets at Waldorf

THE APPROACH to formulating Negro cosmetics has been an incorrect one in that most have been developed with "a realization of how the Negro differs from the White, without considering that major and in many instances much greater differences exist in the Negro group itself." Franklin H. Cooper, of Lena Horne Beauty Products, Inc., New York voiced this opinion at the Nov. 30 meeting of the Scientific Section of the Toilet Goods Association at the Waldorf-Astoria Hotel, New York.

Acknowledging that the Negro constitutes a relatively small percentage of the total U. S. population, Mr. Cooper pointed out that "single-all-purpose products" for this group are probably "less practical" than for the larger, but somewhat more homogenous white population. New findings on skin and hair structure and physiology, he said, indicate that there are differences in the physiology of the skin between Negroes

(*Continued on Page* 61)

Today's loveliest container . . .
*a seamless Peerasol**

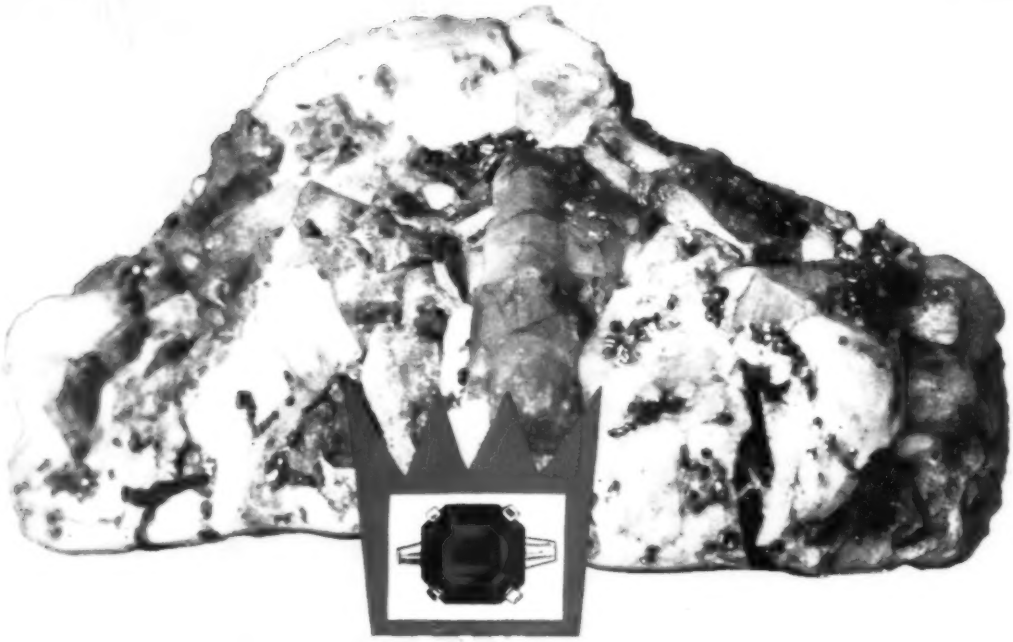
Women love this compact, lightweight aerosol. Fashioned in one piece from gleaming aluminum, Peerasol containers can be handsomely decorated in two, three or four colors over a base coat. Precise valve-cup fit is obtained by a patented process in manufacture. This means leak-proof containers, higher pressures and a high standard of quality control.

Peerasol is the smart container for perfumes, colognes, drug or pharmaceutical products. Write or call for complete information.

*PEERASOL is a tradename of the Peerless Tube Company for this one-piece, seamless aerosol with the patented lip for tight valve-cup fit.

PEERLESS TUBE COMPANY, Bloomfield, New Jersey

Radiant Jewels from Nature's Crown — Fragrances by Norda



Emerald clear are the fragrances Norda creates to help make your products clearly the finest. Knowing Norda craftsmen perform artistry in scents... bring you the ultimate in essences for your proudest creations.

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SAFCA "Congress" Unveils Plans to License Metal Box Co.

THE Metal Box Co., Ltd., of Great Britain, has agreed to make tinplate containers with the SAFCA neck and to manufacture the SAFCA valve. These facts came to light last month in a report of the fourth International Congress of the companies constituting the SAFCA Group. Last year's Congress was held in Bergamo, 35 miles East of Milan, from Oct. 12-14.

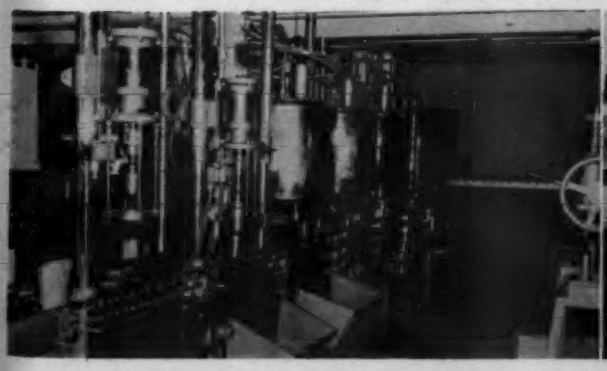
R. A. Gunn-Smith, who represented Metal Box at the Congress, confirmed that his company would begin production probably some time early next year, and said that the SAFCA valve would be sold in Great Britain by Aerosol Associated Industries, Ltd. Metal Box is currently the Precision Valve licensee for the United Kingdom and is the leading producer of tinplate containers in the Commonwealth.

The 1960 Congress was presided over by L. Jaccarino and M. Rossi, co-partners of SAFCA Italy, and consisted of 22 delegates representing Italy, France, Great Britain, Spain, Brazil, and Argentina. Personalities well known to the aerosol industry, led by Rene Pollet, SAFCA founder and president of SAFCA France, attended the meeting. In addition to Messrs. Jaccarino and Rossi, SAFCA Italy was represented by G. Berizzi, M. Zanchi, and R. Gualandris; SAFCA England by M. N. Conville and J. G. Hyland; Metal Box Co. by Mr. Gunn-Smith; SAFCA Spain by P. Haro; and SAFCA France by Mr. Pollet, R. Remane, R. Noyre, Maurice Nollet, G. Eschemann, C. de Colstoun, and M. Auzepy.

The international flavor of the SAFCA Group was reflected by the multi-lingual discussions and technical talks, given principally by Messrs. Hyland and Remane, on the variations of valve design possible with the SAFCA principle. Mr. Hyland said that without sacrifice of universal application of product-propellant

(*Continued on Page* 58)

In photos at top, delegates to the Congress examine the filling line and plant of Safca Italy. Below, the Safca line (at left) and a view of the propellant storage facilities next to the Safca Italy plant.



AEROSOLS in review

A summary of aerosol articles in other publications

Aerosol Starches Are Evaluated by Trade Publication

PRESSURIZED starch products are expected to become one of the "bread-and-butter" products of the aerosol industry, reports the Dec. 12 issue of *Oil, Paint and Drug Reporter*. The publication says it bases this prediction on aerosol industry estimates, coupled with these impressive marketing developments:

1. The test marketing of "Spray Sta-Flo" by A. E. Staley Manufacturing Co., largest starch producer in the U. S.

2. Corn Products Company's "deep interest" in pressurized starches, which *OPD* suggests may soon result in introduction of such a product from the company's Best Foods Division.

3. Purchase by The Simoniz Co. of "Reddi-Starch" from Union Starch & Refining Co., Columbus, Ind. plus the announcement that Simoniz will kick off a nation-wide distribution program early this year. The *OPD* article quotes Arthur F. Connolly, Simoniz general sales manager, as saying: "We believe that proper marketing effort and solid product development could ultimately produce a $100 million market for this type of product."

4. Strong activity in Boyle-Midway Division of American Home Products Corp., Aerosol Corp. of America, and Lestoil, all of whom are marketing products with strong promotional and advertising efforts.

5. Development of specialty starch formulations by National Starch & Chemical Corp. and Polyvinyl Chemicals, Inc., plus interest in the field by the Huron Milling Division of Hercules Powder Co.

6. Introduction of a product by Morningstar-Paisley, Inc.

The *OPD* article has quite a bit to say about formulation difficulties with the starches, and points out that the relatively low starch weight in the container means that "profit for the starch makers, if such there be, is in the aerosol package. And here, costs of valve, cap, container, propellant, and in some cases, the services of a custom filler, make it necessary for a market to have potential for several million units for a company to enter the field with a new product."

The article declares that in a water medium, corrosion can be a problem, but that interior coating of the can is a logical method of conquering this problem. "Vegetable starches have stepped out ahead in the aerosol starch market. However, plastic starches (based on polyvinyl acetate) show promise. Some difficulties have cropped up. The plastic starches are semi-permanent, last for ten to 15 washings. This advantage can be turned to disadvantage if the consumer re-starches a garment by mistake. Vegetable starches, on the other hand, wash out immediately.

"Another problem with some plastic starch materials has been that they require careful compounding by the packager with other ingredients to give ironing ease and increase shelf life. Otherwise, the product tends to separate out into layers during storage, thus detracting from the appearance of the starch and causing draggy, slow ironing, especially if the housewife neglects to agitate the solution before using." This difficulty, *OPD* suggests, is claimed to be solved by Polyvinyl Chemicals new "Neo-Vac" starches formulations for aerosol packaging.

•

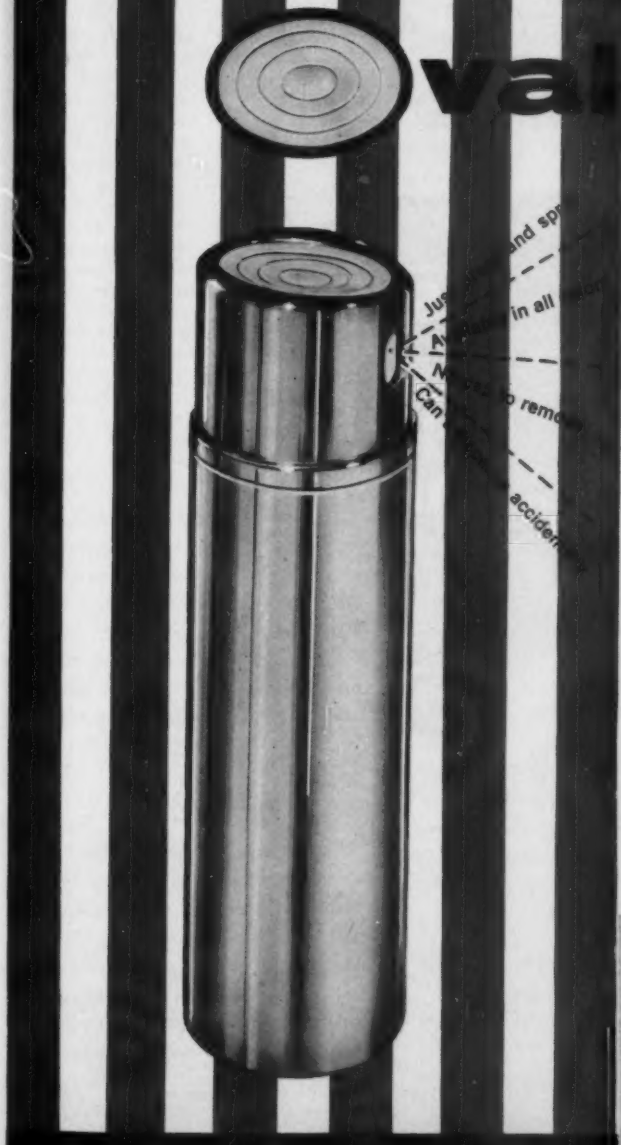
AN excellent article on aerosol containers is featured in the August issue of *Product Finishing*, London trade magazine. Written by P. W. Phillips, of Pressurized Packaging Consultants Ltd., London, it first discusses some of the basic principles of the aerosol package and then delves into some of the important pressure characteristics of the container:

"The weak point of a tin-plate container is its side-seam; for although able to withstand a pressure of, say, 150 lb. per sq. in. gauge for a short period, as in the hot water bath test, the solder in the side-seam may fatigue under quite moderate pressure, say 80 psig., if at a slightly elevated temperature. Side seam construction has been improved over the last few years, first with the ordinary open-top food can type of seam, then with interlocked tabs on the outside of the container, but now on the inside; the tendency of pressure on the external tabs is to open them out, leading to earlier failure than with internal tabs, where the tendency is to compress them.

"The dome and cone of tinplate containers, although sometimes reversing in the hot water bath (the latter first), are well able to stand up to prolonged pressures which would eventually cause a side seam to rupture. A reversed cone or dome is an indication of excess pressure in a dispenser and pronounces it unsafe, just as a 'blown' food can is an indication of excess pressure (in that

(*Continued on Page* 71)

It's New! Trigger-Tip* Oval press actuator by METAL FABRICATIONS



The OVAL PRESS plastic actuator and metal cap available in a wide variety of color combinations to fit 2-ounce containers with one inch mounting cup.

• Just Press and Spray • No Cap to Remove • Can't Be Accidentally Dispensed • Eliminates Cost of Special Valve Ferrule Finishing • Can Be Used With Either Metered or Unmetered Spray • Top Can Be Banded to Protect Against Tampering

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Bottle Closures
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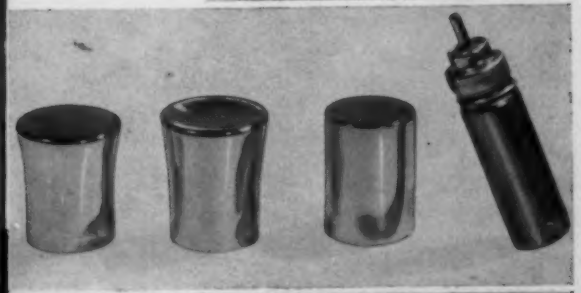
Aerosol Caps and Cans



Containers
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Flaconettes
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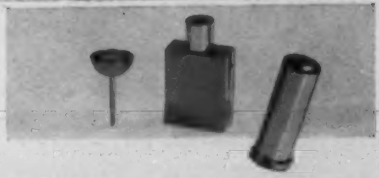
Perfume Funnels
Lipstick Cases



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*Patent Pending

WHO PUT THAT ETHYL ALCOHOL DRUM THERE?

You put it there, of course. The lady doesn't know it, but the perfume she's applying—like many of the toiletries she uses daily—very likely contains alcohol that bears the U.S.I. label.

You put it there because you know that your reputation is at stake every time a consumer uses a product with your label. And you know, too, that your product's quality is only as good as the raw materials that go into it. So for exacting cosmetic and toiletry formulations, you choose U.S.I. specially denatured or pure ethyl alcohol—the brand hospitals have specified for over half a century.

You put that ethyl alcohol drum there because U.S.I.'s reputation for quality safeguards your own.

Write on your company letterhead for complete information on U.S.I. ethyl alcohol.

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news of pressurized packaging

Risdon Appoints Pearson

Richard R. Pearson, who has been with The Risdon Manufacturing Company's Wire Goods Division since he joined the firm in 1951, has been named assistant sales manager of the Aerosol Division. From 1959 until the present, he was assistant sales manager of the Wire Goods Division. He served as assistant sales manager of wire specialties from 1956 to 1959. Before his association with Risdon, he was on the sales staff of the Bassick Co. in Bridgeport. A 1949 graduate of Yale University, Mr. Pearson was a captain in the Army Air Corps during World War II.

•

New Cosmetic Co. in Canada

Prodon Industries Ltd., a new Canadian company engaged in the manufacture of cosmetics, recently started production at its plant at 137 Willowdale Ave., Toronto. General manager of the company, which will market a hair spray, bubble bath and other products, is George P. Proulx.

•

FTC Cites Mennen Commercial

Still another aerosol marketer has run afoul of the Federal Trade Commission with its television commercials. The Mennen Co., Morristown, N. J., marketer of "Sof' Stroke" aerosol shave cream, was cited for its underwater commercial which showed the product to last far better than competing creams in the presence of moisture.

The FTC contended that the Mennen commercial is *not* a valid portrayal of the superiority of Mennen's product and that it falsely disparages competing products. The substance applied by the skin diver in the Mennen commercial, the FTC asserted, was a mixture of toothpaste and shaving cream, and the application described as the competing cream was something less than thorough.

In a reply issued the same week, Mennen contended that it still has the actual films showing how the commercial was filmed under water and that this and other evidence would be used to refute the FTC charges.

•

Aerosols Hit by Consumer Group

The Consumer Advisory Council of the British Standards Institution recently cited aerosols as a prime example of a product that is misleading as to size and value of product delivered. The Council, commenting on new weights and measures legislation proposed by the British Government, cited aerosols as one classic example of a product which is not covered by the proposed legislation. It termed "outrageous" the fact that a 12-ounce aerosol paint package contains up to 78% propellant, and that the consumer is paying 62 cents for the equivalent paint which would cost him eight or nine cents. The story of the Council's statement appeared in a number of British newspapers.

•

ConCan Wins Trust Suit

Continental Can Co.'s long fight to defend itself against violation of the Clayton Act paid off last month in a victory. An antitrust action by the Department of Justice to force Continental Can to divest itself of the Hazel-Atlas Glass Co. was thrown out of court on Dec. 8 by U. S. District Judge Frederick vanPelt Bryan. He ruled that the government's case was based on inconclusive evidence, and swept aside the contention that the acquisition "substantially lessened" competition among ten lines of commerce.

L&F Names Edgar Nelson

Edgar W. Nelson Has been appointed director of marketing for the Lehn & Fink Products Corp., New York. Formerly general manager of the Lehn & Fink Division, he will coordinate the marketing activities of all of the corporation's consumer products, and will be responsible for long-range planning and the integration of marketing research and new product development, as well as supervising art and packaging design work for all consumer products of the company.

Before joining Lehn & Fink in July of 1959, Mr. Nelson was for three years senior vice president of Market Planning, an affiliate of McCann-Erickson, Inc. Previously, he was assistant to the president of Lever Brothers Co. and acted in a sales management capacity. Before that, he was a marketing consultant for Booz Allen and Hamilton of Chicago.

•

Pergolizzi Joins Mennen Co.

Frank Perlizzi has been named senior research chemist in the research and development department of the Mennen Co., Morristown, N. J. He was previously with Bristol-Myers Co.

•

Chemway Appoints W. Dennis

Warren B. Dennis, former product development director for the Lady Esther Division of Chemway Corp., Wayne, N. J., has been named Chicago general manager of the corporation, William F. Tiefenwerth, former advertising and merchandising director, has been appointed vice-president in charge of marketing for the Lady Esther Division.

•

Chess Buys Lucien LeLong

Parfums Lucien LeLong, Inc., New York perfume house, has been acquired by Mary Chess, Inc., New York, and will operate as a subsidiary of the perfume and cosmetic firm.

NOW... A New, Purified
PYRETHRUM CONCENTRATE

NON-STAINING! LOW-COLOR!

PRENTISS — NEW PROCESS PYRETHRUM — PURIFIED · LOW COLOR · NON-STAINING

Prentiss GOLD SEAL Pyrethrum and Pyronyl Concentrates Purified! Low-color! Non-staining! . . . and you'll gain these formulation exclusives

1. Full Potency Pyrethrum Concentrate
2. Non-Staining. No ugly green or yellow precipitates
3. Completely Soluble In Kerosene. No filtration during manufacture needed
4. Compatible In All Carriers. Additional auxiliary chemicals not required
5. Stable . . . all chlorophyll is removed

Technical information and samples available upon request.

Ronald McIntyre, chief engineer for Cooper, McDougald & Robertson, Ltd., Berkhamsted, Herts., England, adjusts the 12-foot instrument panel on the new type pyrethrum extraction unit which his company installed in the Newark, N. J. plant of Prentiss. The unit, which employs a tripe distillation process, is the first of its kind to be installed in the United States.

PRENTISS DRUGS & CHEMICALS CO. INC. NEW YORK, N.Y.

Prentiss Drug & Chemical Co., Inc.

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Ribicoff Seen Favoring Consumer

Connecticut's Governor Abraham A. Ribicoff, named last month by President-Elect John Kennedy to be the new Secretary of Health, Education & Welfare, is a staunch advocate of "the consumer" and his nomination may well mean greater emphasis on consumer interests in the FDA. This was the opinion expressed by a number of Washington press observers in the wake of Mr. Kennedy's nomination of Mr. Ribicoff.

These observers point to Gov. Ribicoff's move in 1959 to reorganize all Connecticut state agencies which had anything to do with consumer problems into a single state unit, as an example of his thinking in this area. They cite the cranberry scare and other factors as giving evidence of a striking consumer awareness of the FDA and of its work, and point out that the FDA hopes to ride the crest of this consumer interest to get through more legislation in the next session of Congress.

Meanwhile, there were firm indications from the FDA about what it will ask for when the 87th Congress convenes. One proposal of interest to aerosol marketers would require cosmetics manufacturers to prove the safety of a new cosmetic before placing it on the market. Another would establish quality control standards for drug manufacturers to prove new drugs are useful as well as safe before approval of the new drug applications. All these proposals were outlined in a December conference of the Food and Drug Administration Law Institute in Washington by John L. Harvey, Deputy FDA Commissioner.

•

Island to Mark 20th Year

Island Equipment Corp., 1090 East 31st Street, Hialeah, Florida, will celebrate its 20th year on Feb. 13. Feb. 13th through 17th the company's office and factory will be open to all visitors. Many of their conveyor units will be on display, including the "Styl-O-Vac" carton unloader, "Multi-Tier" unloader, unscramblers, etc. Included will be a brand new item plus an improved innovation of the "Unitized" narrow belt conveyor.

•

Mexican Firm to Make "Freon"

A new Mexican company, Halocarburos, S. A., is being formed by Industrias Quimicas de Mexico, S. A. of Mexico City to produce "Freon" fluorinated hydrocarbons for aerosol propellants, refrigerants, solvents, and fire extinguishing agents, it was announced last month. This will be the first Mexican production of flourinated hydrocarbons, which have been imported during the past 15 years. It will result in an annual saving of 6,000,000 pesos ($480,000) in dollar exchange. All raw materials will be purchased in Mexico.

Industrias Quimicas de Mexico, S. A., which is an affiliate of Stauffer Chemical Co., and other Mexican capital will own 75% of the new company, and E. I. duPont deNemours & Co. of Wilmington, Del. will contribute 25%.

In the manufacture of "Freon", Halocarburos, S. A. will acquire the use of trademarks, know-how and engineering assistance from DuPont. The new company will also produce carbon tetrachloride, a solvent used as a chemical intermediate and as a cleaning fluid. Halocarburos will build plants for both "Freon" and carbon tetrachloride on an existing site owned by Industrias Quimicas de Mexico in Santa Clara, state of Mexico. It is expected that the plants will start operation about mid-1961.

The plant for "Freon" will have an approximate capacity of 3 million pounds a year and the carbon tetrachloride plant will produce about 4 million pounds a year. The two plants will represent a joint investment of about 15 million pesos ($1,200,000). Sales of "Freon" will be handled through the existing distributor organizations in Mexico.

Industrias Quimicas de Mexico, S. A. presently produce carbon bisulphide, xanthates, sulfuric acid, oleum and ammonium sulfate at plants in Zacapu and Morelia (Michiocan).

Old Empire Adds to Staff

Old Empire, Inc., Newark, N. J. custom filler, has announced the appointment of Dr. Margit Vanyur to

Dr. Margit Vanyur

its laboratory staff in charge of quality control of the pharmaceutical department.

Dr. Vanyur received her Degree of Doctor of Pharmaceutical Science from the University of Szeged of Hungary. She worked in several pharmaceutical laboratories in the production of prescriptions, as an analytical chemist in quality control, and as a bio-chemist.

In 1948 she joined the Laboratory Service, 98th General Hospital European Command, U. S. Army as an analytical chemist in the Biochemistry Section. Upon leaving that post, she came to the United States in 1951 to work as an analytical chemist in the Biochemistry Dept. of Beth Israel Hospital, Newark, N. J., until 1952 when she joined the Vitamin Corp. of America as an analytical chemist, assaying vitamins.

In 1955 she joined Standard Drug, Inc. as an analytical chemist in charge of quality control of pharmaceuticals.

•

Tilling Ends Joint Agreement

Thomas Tilling Ltd., London, and Commercial Plastics Ltd. recently announced their joint venture in the aerosol industry has been terminated by mutual agreement. Aerosol Associated Industries Ltd., Aerosol Packaging Co. Ltd. and Safca Aerosol Valve Co. Ltd. become wholly-owned subsidiaries of Tilling and Mondart Ltd., marketer of aerosol products, became a wholly-owned subsidiary of Commercial Plastics Ltd. The announcement issued by Tilling and Commercial Plastics said that the "business activities of these companies will not in any way be affected by the changes in ownership."

Union Carbide Names New Fluorocarbon Team

UNION Carbide Chemicals Co., Division, of Union Carbide Corp., New York, has named a new fluorocarbons marketing team responsible for sales of "Ucon" fluorocarbons to the aerosol, air conditioning, and refrigeration industries.

Husted

Hulten

Operating under the direction of John R. Hulten, newly appointed manager — specialty chemicals marketing, the group consists of E. E. Husted, manager — fluorocarbons marketing; Thomas M. Hartley, sales manager—"Ucon" Propellants; and Charles F. Gray, sales manager—"Ucon" refrigerants. In addition to his duties as head of fluorocarbons marketing, Mr. Hulten is now responsible for marketing of agricultural chemicals.

Formerly manager—fluorocarbons marketing, Mr. Hulten joined Carbide's fellowship at Mellon Institute of Industrial Research in 1941. Following World War II he joined the sales department of Union Carbide Chemicals Company as technical representative. He later became Albany (N. Y.) district manager; Philadelphia district manager; and Central division manager and was appointed to his most recent post in 1957. A native of Washburn, Wis., he received a Bachelor of Science Degree in chemical engineering from the University of Wisconsin in 1941.

Mr. Husted had been sales manager of "Ucon" propellants to the aerosol industry since 1958. He joined Union Carbide Chemicals Company in 1945 and spent five years as a Technical Representative selling synthetic organic chemicals to the plastics, paint and lacquer, textile specialties, and petroleum industries.

Born in Denver, Colo., Mr. Husted received a Bachelor of Science Degree in chemical engineering from Princeton University in 1942. He served three years as a group armament officer in the U. S. Air Force, attaining the rank of Captain.

Mr. Hartley for the past three years has served as sales manager—"Ucon" refrigerants. From 1952 to 1958, he was associated with Linde Co., Division of Union Carbide Corp., where he served as a sales representative in New Jersey, St. Louis and Chicago; and as assistant sales manager of the Gas Apparatus Department. He served two years in the Air Corps and is a 1950 graduate of the Wharton School of Finance and Commerce of the University of Pennsylvania.

Mr. Gray was formerly a technical representative in the "Ucon" propellant marketing group, working out of the company's Chicago office. He joined Union Carbide Chemicals Co. in 1952 and served as technical representative for chemical sales and service in the Western Michigan territory; New York, N. Y.; at the Mellon Institute, Pittsburgh; and in Philadelphia. He was named to his most recent post in 1958. He graduated in 1952 from Purdue University with a Bachelor of Science Degree in chemical engineering; and served two years in the U. S. Marine Corps.

Charles Gray

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Galietto to W-L Sales Post

The Hudnut-DuBarry Division of Warner-Lambert Pharmaceutical Co., Morris Plains, N. J., has appointed Joseph J. Galietto to the post of director of sales. He replaces Clifford W. Pettit, who resigned. Mr. Galietto had been general sales manager since joining Warner-Lambert in March of last year.

•

Aerosol Fragrances Praised

Aerosol-formulated fragrances are in for an "extraordinary fantastic future", Jeans Despres, executive vice-president of Coty and president of the Toilet Goods Association, told a meeting of the Essential Oil Association in New York late in November. As an example of mounting favorable opinion about aerosols, Mr. Despres quoted a department store buyer as describing the aerosol container as "the greatest shot in the arm for the fragrance industry since the invention of the cork".

Turning to what the aerosol offers the consumer, Mr. Despres said it "blends with the air more delightfully" and permits the user to achieve better coverage. He points out that 1959 sales of aerosol fragrances totaled $40 million, while perfume sales were $35.5 million and liquid toilet water and cologne sales were $34.5 million. He reported that aerosol sprays increased 130% in the four years from 1955 to 1959, and that perfumes were up 27.4% and toilet water and colognes up 10.4% during this period.

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Gelb Is B-M Director

Richard L. Gelb, president of Clairol, Inc., manufacturer of hair coloring products acquired by Bristol-Meyers in April, 1959, has been elected a director of Bristol-Meyers.

•

Heller to Revlon Post

William D. Heller has been appointed executive vice president and general manager of Revlon International Corp., New York. He has been associated with Revlon since 1948 when he became controller of the parent company, Revlon, Inc. He has been vice president and treasurer of Revlon International since 1956. He is a director of Schick Incorporated.

Revlon International operates eight manufacturing subsidiaries abroad and distributes Revlon products in 70 countries overseas.

AEROSOL FILLING AT ITS BEST

CONTINENTAL FILLING CORPORATION

COMPLETE FILLING AND PACKAGING SERVICE FOR YOUR PRODUCT

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Walker Heads Chicago SCC

William Walker of Fuller Products Co., Chicago, has been elected 1961 chairman of the Chicago Chapter of

the Society of Cosmetic Chemists. Chairman-elect is Stillman R. Goff, of the Toni Co., and Laura S. Ricketts, also of Toni, was named secretary. William D. Ackley, of International Flavors & Fragrances, Inc., was elected treasurer. In the photograph above Mr. Walker is at bottom right, and the others (in a clockwise direction) are Miss Ricketts, Mr. Goff, and Mr. Ackley.

To head the various SCC committees, Mr. Walker named the following:

EDUCATION—Adam T. Krol, Clearing Chemical Laboratories, Inc.
PUBLICITY—Beverly J. Steinberg, The Toni Co.
HOUSE—Louis Lerner, The Toni Co.
PROGRAM—Warren Hintz, Alberto Culver Co.
HOSPITALITY—Chester F. Maculeski, Clintwood Chemical Co.
INTER-PROF. RELATIONS—Dr. Emery Robert, Fuller Products Co.
MEMBERSHIP—Marshall Sorkin, Helene Curtis Co.
POLICY AND BYLAWS—Fred Timmons, Kolar Laboratories.
LADIES' NIGHT—Barton R. Owells, Chemical Enterprises.

■

Action Plastics Expands

Acquisition of another building, next to its current operating plant, has been announced by Action Plastics, Inc., and the parent company, Colorite Plastics of New Jersey, Inc., both plastic extrusion firms in Paterson, N. J. The new building, comprising 22,500 sq. ft., will bring the total manufacturing area to 67,000 sq. ft., plus storage buildings of 20,000 sq. ft.

Action Plastics is currently installing a new extrusion line, bringing daily manufacturing capacity of aerosol tubing, and other extruded products to well over 1,500,000 ft.

•

D&O Moves to New Location

Dodge & Olcott, Inc., New York, the oldest company in America specializing in the manufacturing and merchandising of essential oils, aromatic chemicals, oleoresins, seasonings, flavors and perfume bases, last month announced the removal of its general offices and laboratories to: Manhattan Industrial Center, 75 - 9th Ave., New York 11, N. Y.

These quarters, furnished with new and modern laboratories, represent the third move of the company since it was established in 1798 within view of the East River dock where the wind-borne sailing vessels moored, laden with cargoes of drugs, chemicals and oils for the young firm. Now overlooking the Hudson River the new headquarters include an extensive and carefully inter-related network of research, aerosol, perfume and flavor laboratories and a complete staff of skilled technical personnel. D & O also maintains the Dry Materials Division in Hawthorne, N. J. and sales offices in principal cities throughout the United States.

•

Revlon Sells "Pinex" Line

Revlon, Inc., last month sold its line of "Pinex" cough preparations to a new company to be called Pinex Co., Inc., the name it had before it was acquired by Revlon. According to Emanual Goren, vice-president of Revlon's Thayer Laboratories Division, the line was sold because it "no longer fits into the future plans of the organization."

•

W-L, 3-M Call Off Merger

Officials of the Warner-Lambert Pharmaceutical Co. and Minnesota Mining & Manufacturing Co. last month announced that they have suspended merger talks and requested the Department of Justice to investigate the proposed combination before they take further action.

Foster Is Named by USDA

The U. S. Dept. of Agriculture has announced the appointment of Dr. Aurel O. Foster as director of its Parasitological Research Laboratories at Beltsville, Md. Since 1941 he has been in charge of the Agricultural Research Service's research on means of controlling animal parasites. In his new position he will direct and coordinate USDA research programs in all phases of animal parasitology at the Beltsville laboratories.

He holds B.A. and M.A. degrees from Wesleyan University and the Sc. D. degree from Johns Hopkins University. He joined the USDA in 1939, after having served five years with the Gorgas Memorial Laboratory, Panama City, Panama in research on parasites preying on animals and man.

•

Amsterdam Speaks to L.A. SCC

In a recent address before the California Chapter of the American Society of Cosmetic Chemists held at the Roger Young Auditorium in Los Angeles, H. J. Amsterdam, president of the Society reported on 1960 operations and on the newly formed International Federation of Societies of Cosmetic Chemists.

Presently composed of 10 autonomous national Societies, among them the United States, England, France, Italy and Germany, the Federation was chartered at Munich early in September and provides for worldwide exchange of information and encouragement of research and development in the cosmetic sciences. Mr. Amsterdam observed that this new international organization marks an important advance in cosmetic science, the benefits of which should accrue to the cosmetic scientist and to the industry at large.

Mr. Amsterdam, who has been in charge of cosmetic research at International Flavors & Fragrances Inc. for the past 10 years, represented the American Society at the Munich meeting, along with G. de Navarre, former president, and Dr. S. Plechner, president-elect of the Society.

Du Pont Names Tech. Associates

The Du Pont "Freon" Production Division, Wilmington, Del., recently named six members of its staff to the newly-created position of technical associate—Dr. Frank W. Blodgett, Dr. Ralph C. Downing and Dr. Fred S. Palmer of the technical section, and Dr. B. J. Eiseman, Jr., Robert B. Ramsey, Jr., and Dr. Paul A. Sanders of the "Freon" Products Laboratory. The title of technical associate is awarded to scientists who have achieved recognition as experts in their fields of applied research and who have contributed significantly to the work of the "Freon" Products Division.

Dr. Blodgett joined DuPont in 1948 after receiving his Ph.D. degree in chemistry from the University of Illinois. He has done extensive research on "Freon" fluorocarbon propellants, especially in the new field of food aerosols. He has been active in the Chemical Specialties Manufacturers Association.

Dr. Downing received his Ph.D. degree in chemistry from the University of Virginia. He joined Du Pont in 1941 as a research chemist at the Jackson Laboratory, Deepwater Point, N. J., and in 1948 was assigned to the "Freon" Products technical sales service section. He has written technical articles on fluorine chemistry, refrigeration and aerosol propellants.

Dr. Palmer, who was also awarded his Ph.D. degree in chemistry by the University of Virginia, has been associated with various research activities of DuPont for more than 25 years. He is the author of numerous technical papers on aerosol subjects.

Dr. Eiseman received his Ph.D. degree from the Massachusetts Institute of Technology where he worked for a year as a research associate. He joined DuPont in 1941 as a chemist and for the last 11 years his research has been predominately in the field of fluorocarbon compounds and their application as refrigerants.

A graduate of the University of Colorado with a B. S. degree in chemical engineering, Mr. Ramsey started with Du Pont in 1942 as a field engineer at the Baltimore, Mr., pigments plant. He was assigned to the Jackson Laboratory in 1948 and shortly thereafter joined the staff of the "Freon" fluorinated solvents and related engineering problems.

Dr. Sanders joined Du Pont in 1940 as a research chemist after receiving his Ph.D. degree in organic chemistry from the University of Minnesota. His initial research led to a number of patents in the fields of fluorescent whitening agents and stabilization of neoprene and other synthetic elastomers to light and heat. Since 1953 he has been concerned with aerosol research. A member of the ACS and CSMA, he has published technical papers on neoprene and aerosol compositions.

•

Ivers-Lee Opens New Plant

The Ivers-Lee Co., Newark, N. J., last month opened a 20,000 square foot plant at 240 Central Ave., Newark. The plant will specialize in liquid and cream filling production.

Davey Joins Fritzsche Bros.

Andrew D. Davey, of Springfield, Pa., has joined the sales organization of Fritzsche Brothers, Inc., and has been assigned to represent the New York essential oil and aromatic chemical firm as manager of the Boston office. He will cover a major part of the New England territory.

Mr. Davey served in the U.S. Naval Air Corps and on discharge in 1946 entered Siena College, graduating in 1950 with a B.S. degree. Going directly into sales work involving chemicals, botanicals and allied products, he became well known in the Philadelphia territory which he served for nearly 10 years.

•

Dodge Is New Colgate VP

Sherwood Dodge, former advertising agency executive, has been named vice-president and director of marketing of the Toilet Articles Division of Colgate-Palmolive Co., New York. Previously he held top executive posts with three major advertising agencies—Warwick & Legler; Foote, Cone & Belding; and Fletcher D. Richards.

New England SCC Holds First Technical Seminar

THE FIRST Annual Scientific Seminar sponsored by the New England Chapter of the Society of Cosmetic Chemists attracted more than eighty people to the University of Connecticut's School of Pharmacy on Nov. 3. During the day-long program planned by Dr. Richard Faust, six papers were presented and discussed. Nevis E. Cook, Boston district director of the Food and Drug Administration, spoke on "Cosmetics and the Problem of Safety."

The next speakers introduced by the moderator, Dr. Chase B. Jones, chief biochemist of the Gillette Safety Razor Co. were Dr. George E. Osborne, professor and chairman of the Department of Pharmacy at the University of Rhode Island's College of Pharmacy and Dr. Robert Gerraughty, assistant professor of Pharmacy at the same school. Their paper was on the "Protective Barriers for the Skin." Dr. Bernard Appel, chairman of the Department of Dermatology at Tufts Medical School then spoke on "The Inherent Protective Properties of the Human Skin."

The luncheon speakers were Dean Hewitt of the University of Connecticut's School of Pharmacy and by Jesse H. Starkman, chairman of the New England Chapter of the Society of Cosmetic Chemists. In the afternoon session Dr. Charles J. Kensler, vice president of Arthur D. Little, Inc., told the group about the "Problems of Chemical Carcinogenesis." "The Interpretation of the Clear Zone Technique for Measuring Bacteriostatic Activity" was next discussed by Dr. Irving H. Blank, associate in dermatology at the Harvard Medical School. Dr. I. I. Lubowe, Associate Dermatologist at the New York Metropolitan Hospital Center, concluded the presentation of papers with comments of "Topical Agents for the Treatment and Prevention of Disorders of the Scalp."

Concluding the day's activities was a tour of the University of Connecticut's new science-research building.

Wherever She Goes...

she will treasure

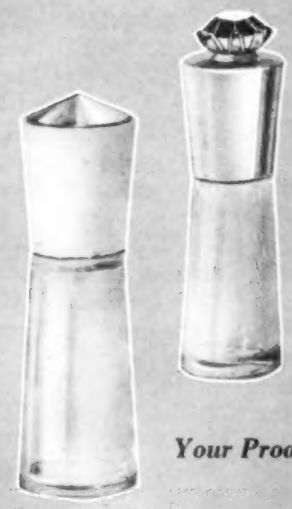
these handy, refillable containers

RICHFORD'S OUTSTANDING PURSE-SIZE FLACONS

Available in an unlimited selection of bottle and cap combinations, Richford has designed these beautiful flacons to meet "her" needs.

Princess

Featuring the new snap-off gold metal case, for easy bottle replacement. Available with futura or assorted caps in exceptional finishes.



1 and 2 dram sizes
spillproof or standard openings
with futura or assorted caps
in a variety of finishes.

Your Product Deserves

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Executive Offices and Plant
3618 Oceanside Rd., Oceanside, N. Y.
Showrooms
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Sales offices in all major cities throughout the world

Write now for samples and prices.

SCC Installs New Officers

At the annual Presidents Night, held at the George Washington Hotel in New York on Nov. 2, H. J. Amsterdam installed the 1961 Officers of the New York Chapter of the Society of Cosmetic Chemists. In a short ceremony preceding the speaker of the evening, the gavel was turned over to Dr. Saul Bell, chairman. Dr. Martin Katz, chairman-elect; Agnes Korte, secretary; and Robert J. Schiraldi, treasurer, assumed their new duties for the coming year.

Retiring Chairman Dr. John M. Longfellow presented past Chairman Theodore Ostrowski with a plaque in recognition of his years of service to the New York Chapter.

•

Va. Court Okays Fair Trade

The Supreme Court of Virginia has endorsed the "verbal notice" form of the fair trade contract in the first top state court decision affecting this concept. The decision, handed down after 28 months of litigation, was the result of a lawsuit brought against General Electric Co. by Standard Drug Co., Richmond.

The verbal notice form of fair trade is a device designed to circumvent court objections to the non-signer clause in most fair trade laws. In many such laws, the attempt to bind non-signers to the terms of the contract, signed by perhaps only a single retailer in the state, has resulted in invalidation of the law on the grounds it deprives non-signers of rights to their own property without due process of law. The verbal-notice assumes that all retailers handling the fair-traded product have received adequate verbal or written notice of the minimum retail price established by the manufacturer, and that such notice establishes a "common law" contract.

The specific case in Virginia involved G.E.'s flashbulbs, which were sold at under the fair trade price by Standard Drug in spite of the verbal notice. Standard took the position that the practice of verbal notice does *not* create a contract.

•

Walter Plaut Heads L&F

Lehn & Fink Products Corp., New York, has elected Walter N. Plaut, former administrative vice-president, to the post of president and chief executive officer. He succeeded his father, Dr. Edward Plaut, who continues as director. A graduate of Wesleyan University, he joined Lehn & Fink in 1946.

•

Carter's Orcutt Is Dead

Charles C. Orcutt, 82-year-old retired president of Carter Products, Inc., New York, died recently at his home in Palm Beach, Fla. He was with the firm from 1905 until his retirement in 1940. His son-in-law, Henry H. Hoyt, is current president of Carter Products.

•

John Struthers & Co. Moves

John Struthers & Co., Ltd., Canadian custom filler, last month moved its plant, laboratory, and offices to 5710 Royalmount Ave., Mount Royal, Montreal 9, Que. Telephone number of new offices is RIverside 7-2481.

•

SCA Appoints Hoh

Strong Cobb Arner, Inc., Cleveland, a leading custom pharmaceutical manufacturer, has appointed Robert H. Hoh Central regional sales manager. Previously Western regional sales manager, he will be responsible for the overall supervision and servicing of accounts in the central states region. Before joining SCA, he was plant manager of Schenley Laboratories, Inc., Lawrenceburg, Ind.

Rhodes Joins Pest Control Firm

Roland L. Rhodes, former research and development manager of Cook Chemical Co., Kansas City aerosol marketer, has joined Pest Control Supplies, Inc., also of Kansas City, as manager. At Cook Chemical he was also product manager in charge of marketing the "Prime" professional insecticide aerosol. He holds a bachelor of arts degree in chemistry from the University of Kansas.

Roland Rhodes

•

FTC Begins Perfume Drive

The Federal Trade Commission, which has been very strict with cosmetic advertising over the past year, last month began an across-the-board drive to compel domestic perfume manufacturers, who present their products with terms suggesting French origin to state clearly on the labels and containers the actual place of origin of the product. FTC Bureau of Consultation director John R. Heim said his department would contact all known manufacturers and compounders to acquaint them with cosmetic industry trade practice rules governing representatives of foreign origin statements concerning product statements.

Mr. Heim declared that the disclosure of real origin must appear "conspicuously and in direct connection" with the term suggesting French origin. He cautioned against relegating the true explanation to inconspicuous locations or fine print, pointing out that the origin statement must also appear in advertisement when the French origin name is used.

He admitted that the Bureau has not yet issued an official statement of position on the question, but advised that such a statement would be forthcoming as soon as the first formal complaints have been issued. He suggested voluntary compliance by the industry as the best approach to solving the problem.

Looking for the right incentive program? Look no further! KLM offers a complete package with practical suggestions and **all the material** you will need to run a successful program. In addition, KLM has the widest choice of incentive tours: to Europe, the Caribbean, Far East, around the world. Each tour is flexible — each can be tailored to fit your company budget. For complete information, mail the coupon.

KLM Royal Dutch Airlines
Incentive Travel Department AA-11
609 Fifth Avenue
New York 17, New York

Please have a KLM specialist call on me to outline my incentive program and tour possibilities.

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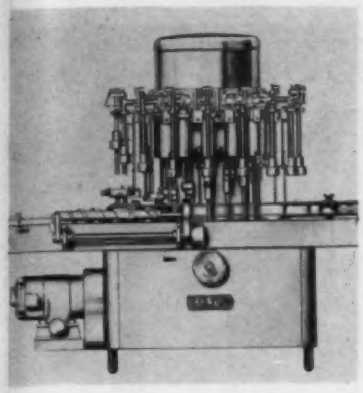
Company_____
Address_____
City_____ Zone_____
State_____

THE WORLD OVER
KLM
ROYAL DUTCH AIRLINES
THE WORLD'S FIRST AIRLINE

equipment processes bulletins

Colton Unveils New Filler

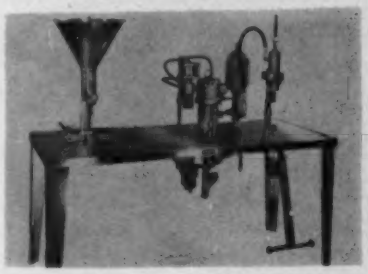
A new model high-speed volumetric rotary filler designed for speeds from 110 to 320 containers per min-



ute is now available from Arthur Colton Co., 3400 E. Lafayette, Detroit 7, Mich. Main features of the machine include: 1. A low-speed, larger-diameter discharge star wheel that reduces whip forces on the filled container, 2. Individual nozzle tip shutoffs, 3. Vernier fill adjustment for each station and 4. An infinitely variable platform rise adjustment for bottom-up filling.

The new filling machine, called the "Model 116," will fill containers from 1½-in. to 4-in. diameter and up to 10-in. high with liquids, pastes, creams, food products, paint, chemicals and similar materials. Amount of fill is adjustable from ¾ to 32 fluid ounces. It utilizes a 16-station design having 16 valve, cylinder and piston assemblies with plastic piston bodies and individual nozzle tip shutoffs. Containers are picked up from a straight line conveyor by a Kinsley timing screw that places them one-at-a-time in an eight-pocket star wheel infeed that deposits a container under a filling nozzle. The container travels around a column while the filling operation is carried out. A 12-pocket Star wheel discharge moves the filled containers back onto the conveyor with minimum whip. The conveyor system is a stainless steel type that is 4½-in. wide and 10-ft. long.

New Aerosol Filling Line



A new compact filling line with a capacity of more than 400,000 units annually has been announced by the Katridg Pak Co., Mt. Prospect, Ill. The modestly priced unit is aimed at enabling marketers to do their own packaging with their present labor and overhead. The unit consists of a concentrate filler, crimper for standard one-inch valve, and propellant pressure filler with accumulator and propellant handling pump, mounted on a stainless steel table in a 30" x 6" floor space.

•

USDA Issues Synergist Booklet

A new bulletin, titled "Evaluation of Synergists for Pyrethrum and Allethrin Against the Body Louse," has been issued by the Agricultural Research Service of the United States Department of Agriculture, Washington, D. C. Written by P. H. Clark and M. M. Cole of the USDA's Entomology Research Division, the 63-page bulletin contains detailed data on results of tests with various synergists. The bulletin is called "ARS-33-62."

•

Laboratory Liquid Weigher

An electronic dispensing device for measuring and accurately weighing miniscule doses of liquids has been developed by Reyers & Zoon N.V., Amsterdam, the Netherlands. The apparatus, designed for use in laboratories, is said to be accurate within 0.2%. The quantity of the substance to which the liquid is proportioned is put on a weighing pan, whereupon the required quantity of liquid is at once weighed electronically, drawn off, and collected in a beaker at the rate of 20 cubic centimeters per second.

•

British Vacuum Crimper

A new valve crimper which uses a vacuum to draw air from the container before it is sealed has been announced by Aerofill Ltd., Walmgate Road, Perivale, Greenford (Middlesex), England. The unit, which may be operated at speeds of up to 20 cans per minutes, applies the vacuum and holds it until the mounting cup is crimped into place. It is operated by foot pedal.

•

Filler Issues New Booklet

Sprayon Products, Inc., 2075 East 65th Street, Cleveland 3, Ohio, last month issued a new brochure describing the company's installations and services. The 12-page illustrated booklet contains a series of photographs of Sprayon's filling line, laboratory, and offices.

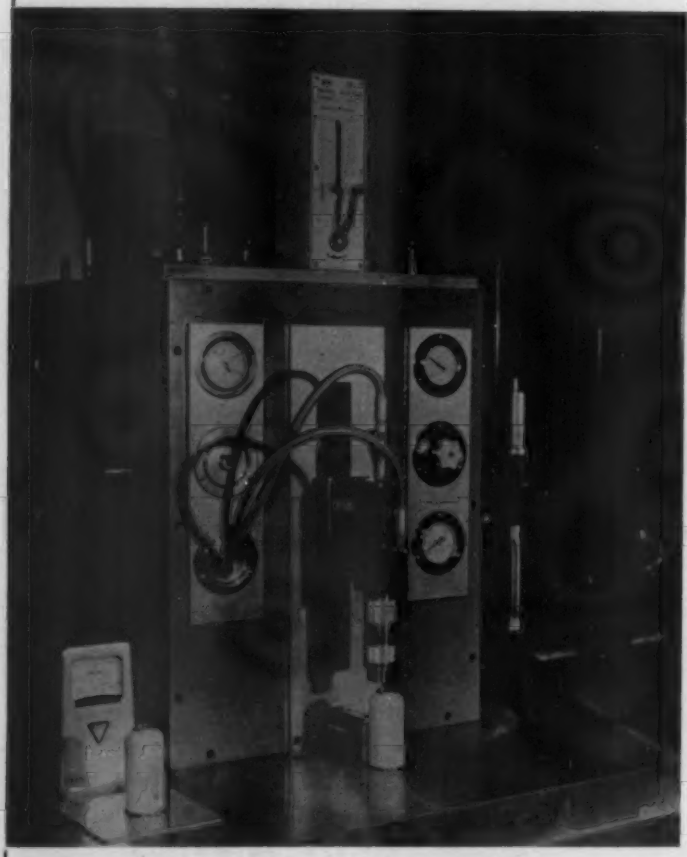
In a foreword to the booklet, John G. Ellis, Sprayon president, urges that "every manufacturer make himself familiar with the possibilities of the self-spraying aerosol container—either as a package or as a touch-up finish, cleaner, lubricant, or some other accessory to be distributed in connection with his product."

Druk Pak's New Models of

Europe's Most Advanced

AEROSOL PRESSURE FILLING EQUIPMENT

For all production requirements (small, medium, large)



- Fully automatic — up to 40 units per minute.
- Semi-automatic single machines — up to 30 units per minute (product filler, valve clincher, propellant charger).
- All equipment is fully pneumatically operated. No electrical controls or connections. The ultimate in safety.

Also offered are all auxiliaries, propellant pumps, accumulators, purgers, unscrambler tables, conveyor tracks, coders, tank type or fully automatic magnetic chain link belt test baths for semi-automatic or fully automatic lines.

Our production machines and laboratory units are in world-wide operation.

For catalogues and prices write:

Manufacturer —
Johann Waldherr, O.H.G.
162, Kaefertalerstrasse
Mannheim, Germany

Sales Representative —
Druk-Pak Inc.
36, Merkurstrasse
Zurich 7/32, Switzerland

New Extruded Plastic Cap

Designed for maximum strength, a new body diameter overcap for 202 diameter extruded aerosol cans has

been introduced by the Walter Frank Organization, package designers and engineers of Hillside, Ill. The new overcap is designed so that it will reportedly seat snugly regardless of valve mounting cup tolerance range. This is made possible by a new production technique providing maximum undercuts.

Made of high impact polystyrene, the rigidity and shock-resistance of the new cap is designed for high production, automatic packaging. Center gating is used in production of the caps to provide maximum dispersion of polystyrene and greater strength. The new proprietary overcap, designated "No. 750," is available in all the basic colors and a number of other fashionable shades. The body diameter cap provides maximum package display and flat top for ease in display stacking.

Further information may be obtained from the company at 4100 Warren Ave., Hillside, Ill.

•

Introduce New Fragrance

Aromatic Products Inc., 235 Fourth Ave., New York 3, has introduced a new lavender-bergamot type of fragrance called "Fougalia." Said to be completely soluble in glycols, kerosene, and other solvents, the material is recommended for insecticides, room deodorants, shaving creams, hair sprays, and other cosmetics and household products.

•

British Introduce Inhalant

Moore Medicinal Products, Ltd., Aberdeen, Scotland, has formally introduced an aerosol asthma inhalant called "Brovon." Plastic-coated bottle is equipped with a metering valve and propellant system by which it is said about 80% of the particles of the inhalant are within the optimum range for penetration into the bronchial system.

•

Silicone Defoamer Price Is Cut

"Major" reductions in the price of silicone defoamers were announced last month by Dow Corning Corp., Midland, Mich. Effective Nov. 14, the new prices range from 4 to 7% for antifoaming compounds and emulsions. The company reported the lower prices were made possible by increased demand, which resulted in lower cost production techniques.

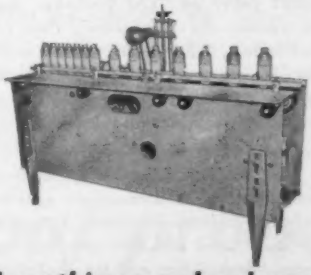
New Merchandising Program

The Illinois Bronze Powder Co., Chicago, has created the "Pot-O-Gold", a new merchandising program to aid dealers in the promotion of the Spray-O-Namel paint line. It

contains complete information on how to display, advertise and merchandise the paint department of a retail store. The program is designed to bring customers into the store and build volume paint sales through a combination of extensive national advertising, co-op advertising and point-of-purchase display advertising. The kit includes ad mats, color-sample cards, radio and TV commercials and window banners, as well as showing

KIWI®

AEROSOL CODE DATING EQUIPMENT
that has *earned* industry acceptance



POWER DRIVEN CODER

With work table area.
For automatic code dating of concave bottoms of aerosol cans.
Will mark top, bottom, or both at the same time.
No change parts needed

Something new has been added . . .

CASE CODE DATER
with Kiwi built-in rubber band type.

- No loose type to become lost
- Ink just once per shift
- Never needs cleaning
- Inker never dries out
- Prints in the same place on every case

Also . . .
case printers for consecutive numbering
or printing information on cases

KIWI® CODERS CORPORATION
Dept. AA, 4027 N. KEDZIE AVE. IRving 8-5117 CHICAGO 18, ILL.

how to tie in nationally with newspaper and magazine ads, direct mailings, displays and other promotional aids.

Further information about the new program and the Illinois Bronze Spray-O-Namel paint line, may be had by writing the company at 2023 South Clark Street, Chicago.

•

New Type Display Packaging

"Delran" is a new low-cost paperboard construction for use in display and promotional packaging. Feature

of the unit is a spotted area of specially formulated pressure-sensitive adhesive which is said to hold round containers without the need for various diecut holding devices. The "Delran" container can be removed easily by the consumer after the package is taken from the store to the home.

Developer of the new display packaging is SH&L, the Design and Art Division of Sudler & Hennessey, Inc., 1 East 59th Street, New York 22, N. Y.

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Nalbach Aerosol Catalog

John R. Nalbach Engineering Co., 6139 Ogden Ave., Chicago 50, Ill., last month issued a new illustrated catalog showing its complete line of aerosol filling equipment. Included are a number of models of gassers and shakers, crimpers, valve feeders, ingredient fillers and complete production lines. Most of the units are shown in either engineering diagrams or photographs, and the complete dimensions, shipping information and prices are included. Copies of the catalog may be obtained by writing directly to the company.

from the EDITOR'S MAILBAG

To the Editor:

I certainly wish to thank you and Montfort A. Johnsen for the most comprehensive article which I have seen on aerosol air fresheners.

As a supplier of 3, 5, 5 Trimethylhexanal, I was interested in reading the extensive data for this compound. Questions which are often asked are: Is the deodorant chemical effective at concentrations *below* the chemical's threshold of odor perception? Can the value of a deodorizing chemical, combined with a fragrance, be demonstrated as statistically significant over and above the effect of the fragrance? Since many of the deodorizing chemicals are irritating to the mucosa, is the possibility of even slight irritation permissible?

I hope that the author, in subsequent articles, will also discuss the use of quaternary ammonium compounds in aerosol air fresheners. These articles are an invaluable aid to our industry.

Raoul Pantaleoni
President
ALPINE AROMATICS, INC.
Metuchen, N. J.

In reply to the questions posed by Mr. Pantaleoni, Mr. Johnson has written the following letter:

Thank you for your letter inviting us to answer some questions asked by Mr. Pantaleoni of Alpine Aromatics, concerning our recent paper on "The Technical Aspects of Aerosol Air Fresheners", Part I. Referring to 3, 5, 5-trimethyl-hexanal and similar deodorant compounds, Mr. Pantaleoni first asks, "Is the deodorant chemical effective at concentrations below the chemical's threshold of odor perception?"

We feel that 3, 5, 5-trimethyl-hexanal and many similar deodorants are effective at sub-threshold concentrations. Naturally, the threshold level will vary according to the aerosol formulation and the conditions under which it is used. At the recommended range of 0.02% to 0.4%, 3, 5, 5-trimethyl-hexanal, 4, 6, 6-trimethyl-heptaldehyde, 4-methyl-2-pentanone and other deodorants having strong characteristic odors are easily discernible under a variety of use conditions. Many other deodorants have less definite odors, such as n-octanal and its oxygenated counterpart n-octyl formate. Here one gets the impression that "something is in the air" but cannot be smelled. It is a weird sensation which is generally overcome by the use of perfumes.

Since all these deodorants are more effective in higher concentrations, most of them are used at levels where they are discernible, but not overpoweringly so. When they contact a malodor, a mixed odor is formed which is of an indifferent type. Perfume, generally present in such formulas, changes the indifferent, chemical odor to one which gives an overall impression which is pleasant.

Mr. Pantaleoni then asks, "Can the value of a deodorizing chemical combined with a fragrance be demonstrated as statistically significant over and above the effect of the fragrance?"

Tests made by at least seven laboratories have shown that the exotic aldehydes, ketones and esters give superior control. Perfumes are often effective in reducing malodors to near threshold levels, after which the deodorant functions to cancel the worst offenders and thus eliminate reception to the total odor. Also, the deodorants give variable control depending upon the malodor involved, so it is a good idea to back them up with a fragrance, for general use. Where the perfume already contains components of deodorant value, the addition of more deodorant gives less dramatic results.

Mr. Pantaleoni's final question is, "Since many of the deodorizing chemicals are irritating to the mucosa, is the possibility of even slight irritation permissible?" We regard slight acute irritation to the mucosa as something that occurs with nearly all air fresheners—whether of the deodorizing type or not. Our physiological reaction to many perfumes can be characterized as "pleasant irritation".

The deodorant aldehydes and related compounds must be classified as more irritant and more toxic than simple perfumes. Concentrations of 3, 5, 5-trimethyl-hexanal in the order of 100 ppm. in air causes lightheadedness upon prolonged exposure. At 5000 ppm. levels test animals died within 24 hours after a 4 hour exposure, due to lung hemorrhage.

Two laboratories now working on improved aldehydic control agents conduct vapor toxicity tests as soon as a material shows any real promise as a deodorant, and before undertaking more extensive odor tests. As a rule, the ester deodorants are much less irritating and less toxic than the aldehydes and ketones, but they are also said to be less effective in the control of odors. So long as the aldehyde and ketone deodorants in air fresheners are kept at their present extremely low levels, ill effects or chronic implications should never constitute a problem.

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To the Editor:

In the "Over the Transom" section of your March issue you mention that aerosol marketers in Cuba would have special difficulties due to new government restrictions on packages sold in this country. This letter is to inform your readers

that we have established a custom filler in Cuba with sufficient capacity to fill all of the aerosols purchased here.

During the two years we have been in operation, we have filled for such customers as Avon, Revlon International, Nestle LeMur, Dana, and a number of others. These companies are filling their aerosols in our plant, and will testify to the fact that the Cuban aerosol market has been steadily increasing over the past few years.

Orlando Argudin
Vice President
LLENADORA DE AEROSOLES S. A.
Havana, Cuba

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Price-Driscoll Moves Offices

Price-Driscoll Corp., producer of silicones and licensor of Dow Corning Corp., last month moved to a new plant at 75 Milbar Boulevard, Farmingdale, New York.

Hazardous Labeling

(*From Page* 29)

style, etc." He acknowledged that the FDA has not yet developed a "clear-cut" definition of its policy of giving extensions for the law, but he advised that the safest course is to "proceed immediately to give the public the full benefits of the provisions of the law."

Mr. Goodrich advised that the toxicity determination would be important. He said the FDA would judge anything with an LD_{50} of 1 gram per kilo of body weight to be "very toxic", and something in the vicinity of 5 grams per kilo to be "not so toxic." In many cases, he advised, the FDA will follow generally accepted industry judgements of what substances are proven to be non-toxic.

Three members of the British aerosol industry attending the CSMA meeting with H. W. Hamilton, the association's executive vice-president. From left are Geoffrey Kean (Durazone Sales), H. R. Hearn (The Metal Box Co.), Mr. Hamilton, and Alfred Herzka (Pressurized Packaging Consultants).

There is really nothing new to the Hazardous Substances Labeling Act, declared Mr. Scriba. He advised that the trend in civil lawsuits toward finding the marketer negligent if his product or package causes bodily injury (especially if the package does *not* contain a clear warning of its inherent danger) has made it necessary that the marketer take steps to protect himself anyway. He suggested that there has been "far too much hullabaloo about the FDA's powers to write secondary and subsidiary rules and regulations" to the original provisions of the law.

As a typical suggested aerosol product label, Mr. Scriba showed a copy of one of his company's newest pressurized products, an automobile spray aroma to impart the smell of new cars to old ones. He advised that it should contain the following wording:

WARNING!
Contents under pressure.
Do not puncture.
Exposure to prolonged sunlight or other source of heat may cause bursting.
Do not throw into fire or incinerator.
Do not let children handle.

The third speaker of the symposium was Dr. Emil Klarmann, who

idiot-proof propellant?

How dangerous are L. P. G. (liquefied petroleum gas) aerosol propellants? In cans whose formulas pass CSMA tests, they are safe. We at Western Filling think, even idiot proof. The hazards exist in the filling plant. There are two. One is explosion and/or fire, the other, off quality material.

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stressed that animal tests often do not agree with human test results in attempting to achieve valid toxicity data. As proof of this he cited methyl alcohol, which is "extremely toxic for humans yet one of the least toxic of all alcohols for test animals." He suggested that some chemicals in dry state will prove less toxic because they will perform more slowly than if dissolved. Many pressurized formulations may be considered relatively safe because they are not as readily available to children as are products in other more conventional packages.

The inherent danger to children Dr. Klarmann stressed, is perhaps the most important single factor in prompting the bill. Approximately 90% of all accidental poisonings, he advised, involve children under five years old. Although there is a 500-1 ratio of non fatal cases, he said, it is toward further reduction of the numbering and seriousness of such cases that the new law is aimed.

Dr. Klarmann reviewed the various federal laws which led up to passage of the new law, stressing that the Federal Fungicide, Insecticide and Rodenticide Act and the Federal Food, Drug, & Cosmetic Acts left a "gray area against which the public did not appear to be protected." He stressed that this "gray area" appears to apply most to household and automotive products, but will also include other products which may be brought into the house. ★

Safca Congress

(*From Page* 39)

combinations, or let-down in spray characteristics, the SAFCA valve has proven useful for dispensing insecticides, hair lacquers, furniture polishes, shave creams and paints. He also revealed a prototype metering valve based on the SAFCA valve principle.

Using a valve assembly with large internal orifices, Mr. Remane demonstrated the possibility of obtaining acceptable spray characteristics by using a two-piece spray head whose regulator insert included a control orifice. He indicated that the SAFCA "M P 5" valve, now accepted as a standard throughout the SAFCA Group, would be offered as a quick-gassing valve in which a whole range of spray characteristics could be obtained by changing the regulator insert in the spray head. Mr. Remane ventured the opinion that the simplicity of the construction of the "M P 5" (it has neither rubber gasket or springs) plus its low production costs would make it one of the world's cheapest and most versatile valves.

Included in the technical part of the program was a demonstration of new French aerosol machinery: a valve crimper, a new pressure filling unit, and an automatic valve assembly line. Later the delegates were given a tour of the School of Industrial Technology at Bergamo, where they were shown the wide range of

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Shown above: Kartridg Pak Model KP500 semi-automatic aerosol line. Unit includes product filler, can crimper, pressure filler, accumulator and propellant pump.

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equipment currently in use for research and quality control in the aerosol and chemical processing industries.

Two factory visits were a highlight of the tour. The SAFCA Italy plant, which has two automatic SAFCA cold filling lines turning out over three million units per year, was toured, as well as the plant of Tubettificio Ligure at Lecco, where 20,000 aluminum monoblock containers (both internally lacquered and fully decorated outside) are produced every day. At the latter plant, it was revealed, similar cans with the SAFCA neck will soon be produced for the Italian market.★

Seymour of Sycamore

(*From Page* 23)

production, making possible better quality and lower prices.

The Seymour merchandising program is based upon evolving a carefully proportioned formula including point-of-purchase displays, colorful packaging, trade advertising, sales aids, and a continuous public relations and publicity educational program. Point-of-purchase is, to Mr. Seymour, of No. 1 importance because that is where the customer actually encounters the product. Seymour offers three different sizes of displays, each designed to meet various space problems in the retail store.

Recently Seymour retained Swofford & Ware, Inc., New York public relations and publicity firm to guide a consumer education program in the printed and electronic press for the Seymour line and to promote the use of paint spray cans. While Mr. Seymour has a favorable opinion about the industry-wide publicity program, he pointed out that few products in the field are comparable in quality and characteristics to each other. "It therefore becomes difficult to promote all spray paint brands. You are promoting the bad with the good."

Mr. Seymour also pointed out that the uniqueness of his company's new, fast-drying alkyd enamels influenced his decision to launch his own nationwide educational program. Articles, pictures, brochures, films and slides will be part of the program. That there is need for additional education efforts among the consumers, he said, is evident to anyone reading the 1960 DuPont Survey on Aerosol Paints. The survey revealed that only 20% of the nation has ever tried aerosol painting, but that of those who have tried it, 82% liked spray cans and would try them again. This compared favorably, he pointed out, with the 86% who use orthodox methods of painting and like them. He said his company's public relations program would promote "ideas requiring the use of his products, thus providing an endless number of ideas for stories and articles."

Unlike some manufacturers, Mr. Seymour does no custom loading. He has strong reasons for this policy. "The quality products", he said, "are apt to come from firms which own their filling equipment, since they have a substantial investment to protect. The custom loader, on the other hand, has a real responsibility to the industry. Too often, the custom filler's customer, with no investment to protect, can and frequently does put shoddy merchandise in spray cans to the detriment of the industry."

Seymour also has some strong opinions on the industry's use of the word "aerosol" (he calls his own line "spray pack paints"). He said: "While the publicity committee of the Chemical Specialties Manufacturers' Association has approved of and use the word 'aerosol', as a leader in the industry, we strongly object. The real scientific meaning of aerosol is 'fine airborne particles', and the U. S. Government uses the word to describe air pollutants. Technically, of course, the word 'aerosol' is applicable to insecticides and room deodorants in which particles become and stay airborne. Being first

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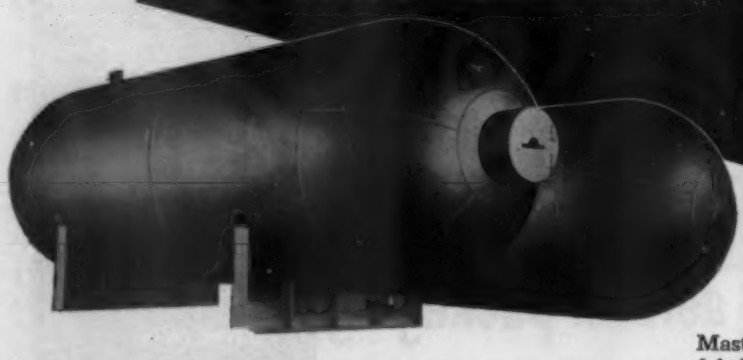

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on the market, 'aerosol' was correct at the time in describing a deodorant. But now it's just a hangover from the past and incorrect too. Therefore we call our products 'spray pack paints' and we intend to continue to do so."

The market potential for the paint end of the industry? As a manufacturer in the field, Mr. Seymour has a good record of keeping his finger on the pulse of his industry. In fact, to date he's batting just about 1000%. Back in 1949, he predicted that 60 million paint spray cans would be sold in 1960. With 55 million cans sold in 1959, he should hit this figure just about exactly.

In discussing future market potential, he points out that the market *has* increased ten-fold since 1953, but scoffs at rosy predictions that the market will increase *another* ten-fold by 1968! He says such an increase would mean that the industry would have to be producing 500 million cans a year by 1968, and that is manifestly impossible.

Mr. Seymour said he believes that aerosol paints have already experienced their most rapid rate of growth and that the percentage of increase will slow down. But he predicts that 80 to 90 million paint spray cans will be sold annually by 1968. ★

TGA, SCC Meeting

(*From Page* 36)

and Whites. He declared that the differences in degree of oiliness and shade of one complexion from one Negro to another may be "more extreme" than those between an average European and an average American Negro. These differences, he said, point up the importance of new approaches to formulating such products as shaving preparations, hair products, make-up shades, and possible anti-perspirants, deodorants, astringents, and skin lotions. Another product which might call for important differences from conventional cosmetics are sun screens and tan inhibitors, since some Negroes would like to prevent their skin from getting darker from sunlight, while others desire darker skin.

One especially promising sun-screening agent is a combination of Van Dyk's "Escalol" 400 and 106, he said, since it appeared to inhibit both the tanning and the burning processes. He said such a formulation is necessary in some Negro cosmetics because their darkly pigmented skin, although offering some protection, is *not* sufficient to provide against burning or further tanning.

As had the Society of Cosmetic Chemists' meeting the day before, the TGA Scientific Section considered dihydroxy acetone as one of its major subjects. A study of the darkening action of the material was presented by Drs. Peter Flesch and Elizabeth C. Jackson Esoda of the Dept. of Dermatology, University Hospital, University of Pennsylvania. Dr. Flesch, who delivered the paper, declared that browing of the skin surface is accompanied by a combination of the free amino groups of the horny layer with the carbonyl groups of DHA. Evidence of this was obtained by:

1. a gradual decrease of free amino groups in human horny layers during incubation with DHA,
2. preventing *in vitro* browing after pretreatment of the scales with formalin,
3. a greater decrease in the reducing groups in DHA solutions incubating scales which were deaminated, as compared with DHA solutions in contact with water-washed scales,
4. preventing browing *in vivo* and on excised skin under conditions of high humidity.

In a paper titled "Studies in the Absorption of a Simple Dyestuff by Hair," Martin M. Rieger and Stanley Brechner of the Warner-Lambert Research Institute pointed up the similarity between dyeing wool and human hair. As with wools, they pointed out acid dyes "take" much better than alkaline dyes, and round hair absorbs the dye more rapidly than "flat" or other non-symetrically shaped hair. This last trait Messrs. Rieger and Brechner attributed to

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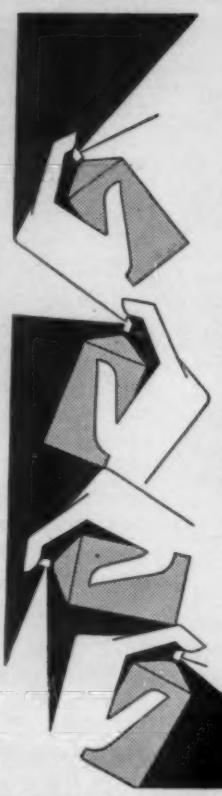

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Peroxide-bleached hair, subjected to water washings, revealed a physical "flaking off" of fibers, it was reported, and the belief was expressed that the peroxide had removed cuticular or epicuticular matter. If treated with acids, they reported, none of the flaking off occurred.★

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Cons. Pack. Names Two in Sales

Consolidated Packaging Machinery Corp., subsidiary of International Paper Co., has recently announced re-assignment of two sales representatives.

Al Atkins, formerly representing Consolidated in the Louisville territory, has been assigned to the Great Lakes Territory, comprising the states of Michigan, Ohio, Indiana, West Virginia and Kentucky. He will make his headquarters in Columbus, Ohio.

Jack Raymond, who has been representing the company in the Great Lakes territory, has been assigned to the metropolitan New York office. He will assist Ed Baum, the Consolidated representative in that area.

British Executive

(*From Page* 33)

economical volume purchase of components, resulted in substantial cost savings. He said that Durazone began with the desire to market a fast-moving volume product and had accomplished this by concentrating most of its selling efforts in the newly-created British self-service food stores. "Prior to the introduction of our room deodorants and insecticides, most aerosol products were marketed in chemists' (you Americans call them 'drug stores') and hardware shops. From the beginning we have concentrated the bulk of our efforts on the food stores, reasoning that these do the most business and operate on a higher volume than do the other retail outlets. Of course, we do sell our products through the other retail outlets as well, but part of the reason for our success has been the good volume developing in self-service stores."

This accent on self-service sales, Mr. Kean suggested, accounts for the company's successes in package contests in Europe and the U.S. "Throughout our packaging, we maintain one principle above all others—that of simplicity. We believe that it is most advantageous to have as few words as possible cluttering up the clean lines of the aerosol can. What words are necessary for brand image and product identification are distributed to give the prospective purchaser immediate eye focus where it will do the most good. We have observed that women just will not look over a complicated label to read through unnecessary copy. Attention has to be captured instantaneously or the sale may not be made."

Durazone (Sales) Ltd. has developed this marketing philosophy over 23 years of competing with high-volume low-profit-margin products such as bleaches and phenolic disinfectants. "Durazone" is the trade name of the company's liquid bleach products and "Choice" the name of its disinfectants. The latter package, in a striking triangular-shaped bottle, has won almost as many packaging awards as has the company's newer aerosol packages. These products, and the knowledge gained in marketing them through food stores and supermarkets, gave Durazone the know-how to bring out its own line of aerosol products in 1959. In addition to Mr. Kean, the key people in the decision to bring out the aerosol line were H. Presman, managing director, and E. Presman, technical executive.

Naturally, Durazone used considerable help in getting its aerosol products from the idea to the marketing stage. Much came from the Metal Box Co. Ltd., supplier of both valves (as the Precision licensee in the U.K.) and tinplate containers. And new products now are developed with the

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BUILDER'S NEW "Combination Drill Press Capper" for Aerosol Bottles and Cans has a Production Rate of approximately 2 per minute with Aerosol Bottles . . . 8 per minute with Aerosol Cans.
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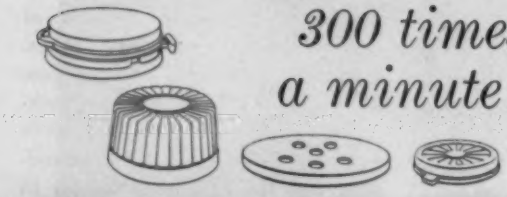

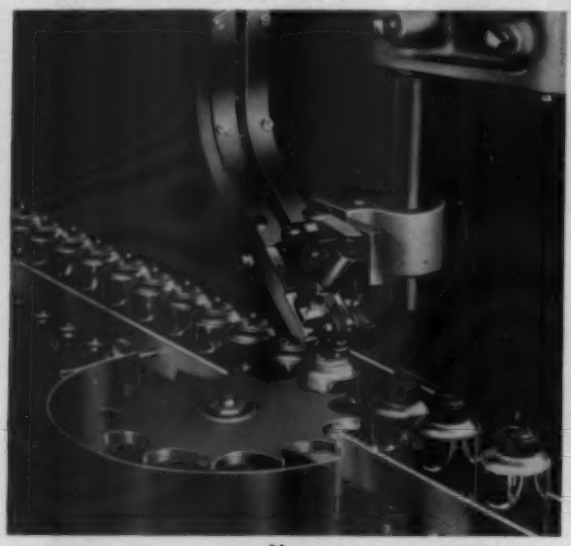

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help of Alfred Herzka's Pressurized Packaging Consultants, Ltd. But Mr. Kean emphasizes that the labels and total packaging design originates with the Durazone management. Mr. H. Presman and Mr. Kean suggest general designs and design principles and these are followed through by two consultant artists employed by the company.

At present Durazone has three separate aerosol lines. "Choice," which is also the name for its phenolic disinfectants, is used as the brand name for aerosol deodorants and insecticides. "Dew" is the brand name for other aerosol products, including household products and room deodorants. And finally, "Tex" is used for a smaller range of aerosols. At present the company has pressurized fly killer, moth proofer, spot remover, cold relief spray, weed killer, shoe shine, window cleaner, and garden spray. Plans are afoot to market several cosmetic products, beginning with a hair spray and possibly getting to other products far afield of Durazone's line of household products.

Mr. Kean reported that Durazone has been filling its own products for the past six months—after using custom fillers for the first year and a half of its aerosol marketing. The installation of British filling equipment, he suggested, has facilitated efficient production runs and has reduced costs. Metal Box cans and Precision and Aerosol Research valves are being used.

Durazone has recently developed a substantial export market, selling products to Finland, Portugal, Switzerland, and some of the Commonwealth countries. Mr. Kean reports that this is made possible by a number of economic factors favoring his company's products. These he listed as: (1) the fact that tinplate cans are cheaper in Britain than in these countries (2) volume production charges for filling are considerably cheaper, and (3) cartons and other "fringe" components are less expensive. He said that both foreign language and British labels are used for these countries.

In addition to newspaper and television advertising, Durazone uses some promotional campaigns not generally seen in this country. Much of the company's advertising money goes into an annual demonstration at the Ideal Home Exhibition at London's Olympia. This exhibition, sponsored by the *London Daily Mail*, draws over one and a half million people per year. It features demonstrations, displays, and attracts foreign and domestic buyers, as well as the general public. Durazone also uses smaller provincial demonstrations, reasoning that retailers as well as consumers learn about aerosols best by demonstration.

Commenting on his impressions of the American aerosol market, Mr. Kean said he was particularly impressed by the decorative lithographic effects achieved by U.S. can makers, and by the overall cover cap becoming so popular in the United States. Two of the product types that struck his fancy were starches and foods, though he acknowledged that lack of refrigeration in the British home would hamper foods becoming commercially important in Britain for the moment.

Analyzing the British market, Mr. Kean reported that lowered consumer prices for aerosols had considerably stimulated sales last year. Asked for a personal estimate of the total British sales figure for 1960, he suggested 50 million—an increase of 100% over the '59 figure of 25 million. "Within three to five years, we think a market of close to 150 million aerosols is possible."★

Pharmaceuticals

(*From Page* 29)

checks at two temperatures, and it may be performed at the propellant manufacturer's level or at the filler's laboratory; or preferably, both. Fur-

ther double checks should be made at the point of filling, as assurance against contamination or changes in propellant ratios."

For the concentrate, Mr. Armstrong declared that assays are often required which take up to two hours to perform, and these must be taken as often as four times per day. For components, he reported that a sampling is made in accordance with Mil. Standards 105-B according to lot size. "For example, for a lot size from 3200 to 8000, a single sampling would be 225 pieces. For a lot size from 22,000 to 110,000, it would be 450 pieces. Examination of these samples indicates acceptance or rejection according to an established acceptable quality limit." He reported that the principal attention of the pharmaceutical filler is concentrated on the valve's performance.

Filling accuracy is determined, he reported, by periodically introducing four tared containers onto the filling line. "They are removed, weighed, and recorded individually on a plus or minus increment method, plotting the average of the range on the production weight chart. A copy of this chart may be incorporated into the final report after the run is over. In pharmaceutical filling, it is universal to adjust the lower control limit to the stated weight of the ingredient statement on the label."

Mr. Armstrong reported that his company has instituted a special program called "examination of previous day production." A sampling of the previous day's production, together with data on overall weight, pressure, test, leak test, spray test, and dosage check, are taken to give the company a complete picture of that day's production—with a view toward improving accuracy on the next day.★

Statistical Control

(*From Page* 29)

filling in terms of these three functions: specification, production and inspection. First, the filling machine must be tested to find the probable limits of its capability and compared with the specification limits. If the result is satisfactory, after checking its natural variation in filling weight at a given speed and specified nozzle, then the filling operation can proceed. The final step in weight control is to determine whether the filled quantity is what was intended."

He reported that there are two methods commonly used to estimate the standard deviation: (1) the frequency distribution method, and (2) the control chart method.

". . . The most time-consuming operation in determining the capability of a filling machine is the weighing of empty and filled cans for the net weight data. The choice of measures to be used in any particular case should depend on the probable use of the statistic. In many instances, it is not necessary to measure weight to one-tenth of a gram. This can be minimized by use of two counterbalanced scales, preferably shadow scales—one equipped with a counter balance weight of an average empty can, and the other with a required fill weight, plus the average weight of an empty can. First, weigh the empty cans of group to be used for the test on the first scale and mark the deviation from the standard, plus or minus quantity; then when the sample cans are filled, check the deviation of each can on the second scale. In both instances, read scale to the nearest .5 gram. Record the findings and compute the average and range of each group."★

Food Quality Control

(*From Page* 28)

biological considerations are essential and said they depend primarily upon the process that is to follow and the product characteristics. "Low pH (below 4.6) high sugar and salt content, generally help eliminate toxic bacteria and retard spoilage." He emphasized that sampling procedures must be validly designed to insure product quality, and that handling equipment was sanitized according to specification.

"Where hot filling is involved, quality control must regularly check temperatures, exposure time and product. Color change, burning, or conversely inadequate temperature or time must be eliminated or minimized. Where other than hot filling is used, spoilage is generally averted by using inhibitors in the product, by flash sterilizing and canning under

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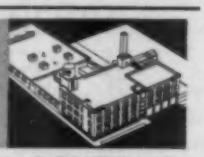

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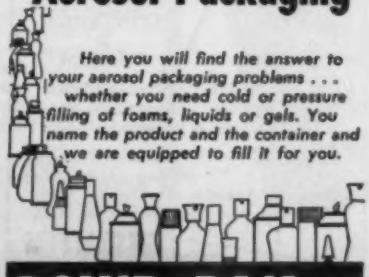

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aseptic conditions, or by refrigerated canning and storage.

". . . Especially important in all processing is proper sanitation. At least once a day, food lines must be disassembled, thoroughly cleaned and sanitized. Quality control must sample periodically at various spots in the line to insure that there is not accumulation or build up or some highly resistant organism that could cause subsequent spoilage. In addition, tests must be set up on the sterilizing agent used to be sure proper concentrations are maintained during the cleaning process."

Mr. Clapp suggested additional safeguards, including a test of vacuum gauges, gas checking, and sampling of finished cartons after sealing. He too suggested long-time retention of samples for future examination, pointing out that "a portion of these should be incubated at 100°F. for a finite period and then examined for spoilage."★

Propellant Control

(*From Page* 28)

Dean declared, provides the "most specific, rapid, and informative method for identification and composition. In fact, for propellant systems employing more than two components, it is the *only* practical means for an accurate composition check.

The presence of ionic chloride, he suggested, can be determined by running marked and tared containers through the propellant filling section of the line and then weighing them after valve crimping to determine propellant fill. For propellant composition he said that vapor phase chromatography offers the best method.

In pressure filling operations where such high-boiling components as propellant 11 are used, he pointed out that there is the chance that the volume filled through the valve may be reduced by previously mixing the propellant 11 with the concentrate in the blending tank. "When this is done, the propellant quality control

checks require an additional step. This is made during the blending of the concentrate with the propellant. To determine the amount of the propellant added in this step, methods such as the vacuum distillation described in the *CSMA Aerosol Guide* or a loss of drying will give the volatile-non volatile component ratio. A rapid loss-on-drying test is to weigh the sample into a tared aluminum dish containing a bed of sand. The amount of residue is determined after flashing off the volatiles over steam."

Mr. Dean cautioned that such methods are accurate only if the concentrate contains no other readily volatilized materials. "For volatile concentrate systems to which propellant 11 has been blended, the propellant addition may be controlled by densiometric analysis."★

Supplier-Customer

(*From Page* 27)

when new standards are being established.

"Decoration defects can be classified according to severity and effect on appearance or legibility. As a rule, we will accept defects, within limits, that do not harm the overall appearance of the design or make the copy illegible. We use actual samples to illustrate the maximum of each defect that we will accept. At present, we are experimenting with three-dimensional color slides which will replace these samples. Besides the agreement with the supplier of the maximum defect, agreement has to be reached on a limit of the number of acceptable defects that can be in a shipment.

"The defects usually found for containers that are damaging to the appearance are as follows:

1. Eye-holing or cat's eyes where the coating does not have a continuous effect.
2. Bleeding where one color runs into another.
3. Misregistration where one color is off register with another.
4. Poor or missing print or illegible copy.
5. Transfer when one decoration is transferred to another due to contact before proper drying.
6. Scratches from rubbing on the manufacturing line."

Mr. McGhie acknowledged that an extensive control program can be "very expensive" to the filler, but advised that the "cost has to be weighed against the attainable results and a decision made on these facts as to how extensive the program should be." He pointed out that rejections are costly both to the manufacturer, and in the long run, to the filler.★

Product Standards

(*From Page* 26)

in weight up to 6 or 7 grams. Therefore it is essential that the empty cans be tare weighted before attempting to make an accurate determination of the fill weight.

"The water bath is undoubtedly the most important test on the production line operation. This test should provide the aerosol container with the most severe strain that it will be submitted to during a typical package lifetime. Consequently any flaws, defects, or leaks should be detected during this test. The water bath test, and the consequent complying with ICC regulations as pertaining to this test, has undoubtedly been one of the major factors contributing to the commendable safety record of the aerosol package.

"Since the pressure in the containers being submitted to the hot water bath test is probably quite high, it is extremely important that the water bath be provided with appropriate protection apparatus to eliminate the possibility of injury to the operator by exploding cans. This protection equipment should be sufficient to stop an exploding can from coming to contact with the operator, and at the same time allow good visibility of the units being tested.

"Since the basic purpose of the pressurized package is to provide an

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automatic dispensing system, it is essential that the valve work satisfactorily. With only a couple of exceptions, we spray test 100% of our production. If a common spray package is being filled, then these packages are generally spray-tested automatically with an observer watching that the valve mechanism dispenses the product, and further that following this test the valve mechanism shuts off satisfactorily. When a special valve configuration is used, such as involved in the mechanical break-up buttons, and where a particular spray pattern is desired, then it is necessary to spray test by hand, which allows the individual spray test operator to observe and evaluate the spray pattern. This latter method of spray testing is used to eliminate even a small number of mal-molded or defective parts in the valve."★

Valve Suppliers

(*From Page 25*)

or comparator, examine the chambers for shape and molding irregularities.

"Stem

1. Crosshole or stem orifice diameter—in the same manner as the button.
2. Flash, burrs.

"Washer Gasket

1. Dimensional measurements — I.D., O.D., and thickness can be measured if desired.
2. Irregularities such as ragged cutting, extraneous shreds of rubber, wrinkles.
3. Material—tests to determine whether proper rubber was used.

"Spring

Normally, examine only for irregularities. However, you may check for dimensions, material, compression.

"Body

1. Orifice diameter—as on the bottom and stem, particularly if the orifice is restricted.
2. Flash, stake damage.

Shortcomings which are uncovered, Mr. Brusky suggested, should be relayed promptly on to the valve supplier, since he will want to know how to improve his own quality. He advised that certain minor shortcomings will be "culled out" in the filling process.

"During actual filling operations, there are several places where valve quality and performance might be jeopardized. Make sure that cans are clean and that contents are free of foreign material or precipitate so that valve passages do not become blocked or clogged. Whether you insert valves by hand or machine, make certain that the valve is not damaged, that dip tubes do not fall off, that valves that fall to the floor are examined for dirt or damage *before* being recommitted to the line. Make sure the crimper is not damaging the valve. If you are pressure filling, make sure you are not depressing or cocking the pedestal so as to alter the sealing and action characteristics of the valve. Watch those operations where actuators are being applied and where spray testing is being done, so that damage is not occurring. Make sure the water bath is not changing valve characteristics; submersion of some actuators in hot water affects their spray patterns. Collect water bath data and determine the cause for leakers.

"As units emerge from the water bath, make sure they are dried off properly so the valve cups do not rust. Make sure that labeling and overcapping operations are not damaging the valves, knocking off the actuators, and the like. Some of these things may sound ridiculous, but they are important and if neglected, can cause untold trouble."

In conclusion, Mr. Brusky suggested that the filler retain a sample file which can be examined when

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necessary for shortcomings which may develop after prolonged storage. "By all means, take apart valves where the customer has complained of poor spray pattern, intermittent spray, no spray, leakage, around the valve, valve shut-off failure, and the like. Correlation of complaint information and retained sample inspection may be very enlightening."★

Quality Control

(*From Page* 24)

on with favor. As a matter of fact, a new product often offers an entry to new business for an aerosol loader. Recognizing this, his starting point should be with a new products man who is marketing oriented. In any case, I believe that the aerosol loader must seek out the marketing oriented people in the organization and learn what marketing philosophy exists and, specifically, what quality of product is required.

"The second step for the loader is to pass this information on to the people in his organization who actually will do the producing and will check its quality.

"Third, I believe the quality control people, armed with this information, should set up in addition to their present tests, some actual use tests on a very simple basis. In so doing, they should put themselves in the position of the ultimate consumer of the product. They should plan a test that actually uses the product. Knowing what the product is intended to do, they can determine, at least roughly, whether it does what it is supposed to do. Now, this is not an attempt to withdraw the responsibility from the manufacturer. It is, rather, a supplemental aid necessary to meet the simple problem of geographical separation of manufacturer and loader. As you know, some manufacturers go so far as to put their quality control teams into loaders' plants for production runs. But this is expensive and the loader can do this job. It would require very little added expense if the loader were to put himself in the position of being a judge of the product's actual quality."

Citing the example of a furniture polish (in aerosol form) Mr. Harrison suggested that after thorough familiarization of the marketing needs of the product by the filler, the filler should devise some simple use tests to measure the characteristics of speed of use and ability to shine. "If the product will not do these basic things, it matters very little whether net weight, pressure, and spray pattern are satisfactory."

He advised that the loaders are, in essence, part of the manufacturer and must assume greater "responsibility for product quality than a few, often meaningless, numerical specifications.

The manufacturer, if he is reputable (and this includes the great majority of us) will welcome rather than be embarrassed by an added service that will tell him that his production runs the risk of being unsaleable. And the sooner he finds out the better. Now the cause of this malfunction is certainly not the loader's responsibility. But he has the responsibility to bring such information to the attention of the manufacturer so that appropriate steps can be quickly taken."★

Aerosols in Review

(*From Page* 40)

case due to food spoilage). The shape of the dome and cone has a great influence on the reversing pressure, as does the 'substance' of the plate used. The heavier the substance (the thicker the steel), the higher the reversing pressure. There is, however, also more difficulty in stamping out the components and then achieving a satisfactory double seam, from the leakage point of view. Here it might be mentioned that thickness of the side seam (four or more times the thickness of the plate) is a likely cause of leakage at the side seam to double seam junction — a leakage rate of 1% of the contents per year at 95°F. is generally agreed the maximum that can be allowed due to all sources, including the valve and its closure.

". . . For manufacturing reasons, internal lacquering of the container is *not* the complete solution to packaging alkaline products. Instead of starting with plate in sheet tinplate, one or more coats of lacquer are applied to the sheets by roller coating, but two facts must be considered. First, a gap must be left in the lacquer in the region of the side-seam, to avoid scorching during soldering, with the risk of exposing tinplate to the pack in that area. Added protection can be given to the soldered side seam region either by applying a side-stripe over the side-seam, before the dome and cone are seamed on, or by applying a sprayed or flushed lacquer to the completed can. The lacquers used in tinplate dispensers are of the epoxy type for the base coat, and either expoxy or vinyl for additional coats."

Mr. Phillips cautions about electrolytic action between aluminum and tinplate for aluminum containers, pointing out that the mounting cup should always be coated. He suggests that the higher cost of lacquering aluminum cans is due to "the fact that to pass a given quantity of cylinders through an oven for a given temperature/time combination obviously requires much more oven space than for the equivalent number of tinplate sheets."★

•

Mexican Cos. Group Elects

Eduardo Meurinne of Establecemientos Emeur, S.A., has been elected president of the Mexican Cosmetic Association (Asociacion Nacional De La Industria De Perfumeria, A.C.). Other officers elected for the coming year include:

Vice President: Eng. Guillermo J. Tervino, Kolmar de Mexico, S. A.
Secretary: Federico O. Gerzso, Max Factor & Co.
Pro-Secretary: Ramon Pando, Industrias Selectas, S. A.
Treasurer: André Salomon, Ansa, S. A.
Pro-Treasurer: Francisco Huerta, Cia. Importadora de Perfumeria, S. A.
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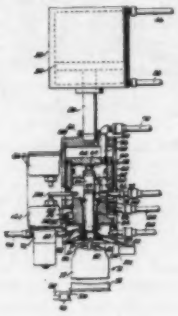
New Aerosol Patents

Listed below is a brief review of recent patents pertinent to the aerosol and related industries.

Complete copies of these patents may be obtained by writing to the Commissioner of Patents, U. S. Patent Office, Washington 25, D. C., and remitting 25 cents for each copy desired.

2,958,170. APPARATUS FOR FILLING AND CLOSING AEROSOL-TYPE DISPENSERS. Issued Nov. 1 to Carl H. Meyer, Jr., Wilmette, Ill., assignor, by mesne assignments, to The Kartridg Pak Co., Chicago, a corporation of Iowa.



In an apparatus for pressurizing and closing aerosol dispenser containers presented with a cup-shaped closure top loosely assembled in the filling opening of the container, a head having a chamber opening from one end and dimensioned to receive the upper end of the container, a sealing ring encircling the open end of the chamber engageable with the container to form a gas tight seal around the filling opening of the container, a tubular transfer member reciprocable in said chamber, a sealing ring carried on the end of said member engageable with the closure top to form a gas tight seal around the marginal edge of the top, an expansible crimping die disposed within said tubular member and projecting therefrom into the interior of the closure top when said member is in sealing engagement with the top, means for expanding said die to frictionally grip the closure top, and means for retracting said member and said die as a unit to withdraw the closure top from the container while maintaining the seals around the container and the closure top intact.

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2,959,325. METHOD AND APPARATUS FOR DISPENSING DRY POWDERS. Issued Nov. 8 to Walter C. Beard, Jr., Naugatuck, Conn., assignor to The Risdon Manufacturing Co., Naugatuck, Conn.

The method of dispensing solid materials directly in dry powder form which comprises maintaining in a valved container a suspension of a powdered material solely in a liquid in which the said material is not appreciably soluble, the specific gravity of said liquid being such as to inhibit agglomerative sedimentation of the powdered material in the container, and the said liquid having a vapor pressure above atmospheric at ambient temperatures, and operating the valve of said container to discharge into the atmosphere a stream of dry powdered material carried in a stream of moving gas, said gas being formed by

volatilization of said liquid in said container upon release to atmospheric pressure by operation of the container valve.

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Design Patent 189,323. CONTROL LEVER UNIT FOR AEROSOL DISPENSERS. Issued Nov. 22 to Herman Epstein, 3631 Troost Ave., Kansas City, Mo.

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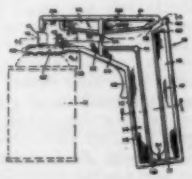
2,960,260. ACTUATION HANDLE FOR DISPENSING CANS. Issued Nov. 15 to Louis F. Kutnik, West Hollywood, Fla.



An actuating handle attachment for a dispenser of the class described, said attachment being unitary in construction and formed of resilient material and comprising a bifurcated hand grip portion including a pair of spaced arms shiftable toward each other when the hand grip portion is squeezed, one end of one arm of the hand grip portion being formed to provide a camming element, a support extension carried by the corresponding end of the other arm of the hand grip portion and extending generally at right angles to the hand grip portion and beyond one side thereof, means carried by the support extension and connectable to said dispenser to facilitate lifting and manipulating the dispenser, a rocker arm spaced from the support extension and substantially parallel thereto and having an inclined cam face near one end thereof adjacent to said camming element and engageable with the latter when the arms of the hand grip portion are squeezed together, a resilient element interconnecting the rocker arm and support extension and serving as a pivot for the rocker arm when the latter is rocked due to engagement of the camming element with said cam face, and an element secured to the rocker arm near its end remote from the hand grip portion and engageable with a movable element of the dispenser to operate the dispenser when the rocker arm is rocked in one direction.

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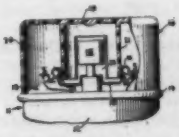
2,961,128. COVER FOR PRESSURIZED FLUID CONTAINER. Issued Nov. 22 to Raymond J. Cochran, Old Oak Road, Fairfield, Conn.



In combination, a pressurized fluid container having a top lid with a central recessed insert joined to said lid by a circular outwardly rolled bead and carrying a valve for normally closing the container; and a valve-protecting cover comprising a top wall, an outer side wall depending from the periphery of said top wall and seating on the periphery of said top lid, and a generally cylindrical portion depending from said top wall and extending axially, at its lower end, within said recessed insert, said cylindrical portion having longitudinal slots opening at said lower end and radially outward directed substantially rounded projections at said lower end adjacent, said slots yieldably engaging the inner side of said outwardly rolled bead below the minimum inner diameter thereof to permit the radially inward and outward springing of said projections and to releasably hold said cover on said container.

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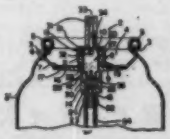
2,961,131. AEROSOL BOMB DEVICE HAVING SAFETY MEANS. Issued Nov. 20 to James W. Bradbury, 220 Greenmount Ave., Springfield, O.



The combination, in an aerosol bomb structure of a container and a dished cover for the container closing and sealing the container, said dished cover having filling valve means and outlet valve means, said filler valve means comprising an orifice in the base portion of the cover and below the upper extremity of the outlet valve means, a closure for the orifice in the form of an apron which is flexible, gas-impervious and resillient but which is

penetrable to pass gas therethrough, and said outlet valve means depending below the cover and supporting said closure beneath the orifice.

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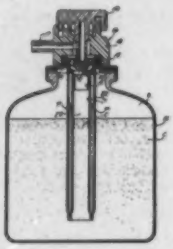
2,962,196. PRESSURIZED PACKAGE. Issued Nov. 29 to John E. Ayres, Mountainside, N. J., assignor to Oil Equipment Laboratories, Inc., Elizabeth, N. J.



In a package for dispensing a commodity from a container under pressure from a vapor through a valve-controlled opening in the container, which comprise, a container having a valve-controlled opening therein and containing a supply of a commodity, a coupling member having an opening therein communicating with the valve-controlled opening in the container and a pair of tubular members connected to the coupling member at their upper end, said tubular members being arranged in spaced relation to each other with one member inside of the other member and being sealed together at their lower ends to form a separate chamber in the container for receiving a supply of a propellant of the liquid-vapor type in liquid form, at least one of said tubular members being formed from a material which is permeable to vapor from the supply of liquid propellant, said inner tubular member also forming a passageway communicating with the opening in the coupling member and the bottom of the container.

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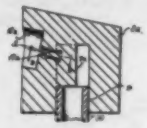
2,962,228. VALVE OPERATING BUTTON FOR DISPENSING PRESSURIZED MATERIAL AND DIE FOR FORMING THE SAME. Issued Nov. 29 to Robert H. Abplanalp, Bronx, and John R. Focht, Yonkers, N. Y., assignors to Precision Valve Corp., Yonkers.



A valve operating button for the tubular valve stem of an aerosol container, said button being a one-piece integral molding having in its bottom a socket to receive an associatd tubular valve stem, a discharge opening through the lateral side of the button merging interiorly of the button with a circular chamber positioned laterally of the axis of the socket, at least one helical channel leading from said socket to said circular chamber substantially tangentially of the latter, and a cylindrical rod integral with the button and extending from the said circular chamber coaxially of said channel with its cylindrical surface contiguous to the open side of the channel.

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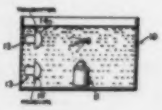
2,961,869. LEAKAGE TESTING APPARATUS AND METHOD OF TESTING. Issued Nov. 29 to Samuel M. Bango, Belleville, N. J., assignor to Walter Kidde & Co., Inc., Belleville.

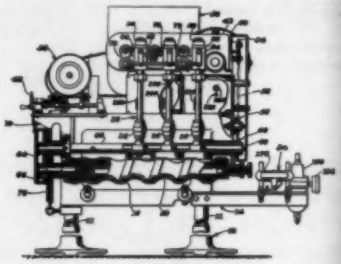


Testing apparatus for detecting the leakage of a gaseous fluid from a container confining the same, said apparatus comprising a receptacle for containing liquid into which the container to be tested is immersed, means for generating energy of a given high frequency, means for radiating the energy into the liquid to fill the receptacle wtih waves of energy, means submerged in the liquid for receiving the radiated energy, means electrically connected to said generating means and said receiving means for detecting a difference in frequency between the signal generated and the signal received such as caused by a bubble of gaseous fluid escaping from the container and passing upwardly through the liquid, indicating means, and means for effecting operation of said indicating means in response to the detection of a frequency difference.

•

2,960,223. CONTAINER INSPECTION APPARATUS. Issued Nov. 15 to Frederick E. Fauth, Baltimore, Md., assigned to Crown Cork & Seal Co., Inc., Baltimore.

In an apparatus for detecting filled containers having abnormal internal pressures, a container conveyor for continuously transferring containers in a row, a stationary frame structure, a plurality of testing heads carried by said frame structure above and in alignment with said container conveyor, means cooperating with said container conveyor to space containers travelling thereon as they pass beneath said plurality of testing heads means for simultaneously moving said testing heads into and out of simultaneous engagement with a plurality of containers, said testing heads each having a switch thereon operable when said testing heads are in engagement with a container having abnormal internal pressures, a container reject indicator memory device, said memory device including a rotating disk having a plurality of movable pins on its periphery, a plurality of magnetic coils, one of said coils being connected to each of said switches and positioned adjacent said rotary disk, said magnetic coils being energized upon the closing of said switches to move



the pins on said rotary disk, a reject switch positioned adjacent said rotary disk and in the path of the pins thereon when the pins are disposed by energizing of said coils, and ejector means for ejecting containers detected with abnormal internal pressures from the row of containers, said ejector means including a piston member positioned adjacent the container conveyor and movable across the rows of containers traveling thereon, said piston member being operated by closing said reject switch by any of the pins on said disk when disposed by energizing of any of said magnetic coils.

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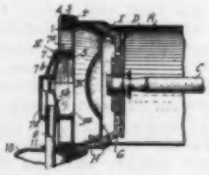
2,961,170. SPRAYING DEVICE. Issued Nov. 22 to William Martin Vogel, Jr., Mendham, N. J., assignor to Standard Container, Inc., Montclair, N. J.



A liquid sprayer comprising a cylinder for supplying air under pressure, and a spray head including a main plate secured on and closing one end of the cylinder and having a polygonal cup-shaped integral forwardly extending projection including side walls and a front wall, said front wall being provided with a plurality of orifices, for passage of air from said cylinder, and a cap-like auxiliary member of polygonal shape corresponding to said projection and snugly fitted over the exterior of said projection and secured thereto, said auxiliary member having side walls in frictional telescopic contact with the side walls of said projection, and a front wall, portions of which are in spaced relation to the front wall of said projection, forming a chamber therebetween, the front wall of said auxiliary member being provided with orifices in axial alignment with the orifices in said projection, and means for supplying liquid to said chamber.

CLASSIFIED ADVERTISING

Address all classified replies to Box Number c/o *Aerosol Age*, PO Box 31, Caldwell, N. J. Rates for "Help Wanted" advertisements are 20¢ per word; minimum charge $3.00. Rate for individuals seeking employment is 5¢ per word. $1.00 minimum. Advertisements of new machinery, products and services accepted at the rate of $10.00 per column inch. Minimum space, one inch. Copy closing date, 10th of preceding month. *Checks must accompany all orders.*

HELP WANTED:

PRODUCTION SUPERVISOR
for aerosols

Leading cosmetic manufacturer in Northern N. J. expanding its aerosol dept. requires the services of a top notch supervisor with experience in this area. This is an unusual growth opportunity offering a good starting salary plus generous employee benefits. In confidence send detailed resume and salary requirements. Our staff knows of this ad. Box 238 c/o Aerosol Age.

AMERICAN COMPANY setting up its own aerosol filling operation in Great Britain requires first class man take full charge. Applicant must have a good technical background, coupled to production experience, preferably in aerosol. Salary and prospects in this expanding company are excellent. Write Box 235, c/o Aerosol Age.

PRODUCTION MANAGER: Full charge of all phases of aerosol and liquid filling operation. Must have broad experience with automatic equipment, plant layout, methods and cost reduction. Well established, rapidly growing company located near Washington, D. C. Mail complete resume to Box 4038, Washington 15, D. C.

HELP WANTED:

AEROSOL CHEMIST

Consideration of a new aerosol process and products has created a need for a Scientist to assume the responsibility for research, development and commercialization. This would involve direction of laboratory research, pilot plant or small scale production and considerable contact with other firms. Initial impact aimed at the consumer field with possible application in other markets.

Applicants should have at least a B.S. degree in Chemistry, Chemical Engineering or related science. A good knowledge of engineering principles will be required as well as sound business understanding. Experience and/or knowledge of the aerosol field is essential. Contact:

Cal Butler
THE PILLSBURY COMPANY
Minneapolis 2, Minnesota

RESEARCH AND DEVELOPMENT CHEMIST: Opening in New England area for experienced research and development chemist in the field of chemical specialties (aerosols, cosmetics, surfactants). Excellent future for right man—liberal fringe benefits. Replies confidential. Send complete resume to Mr. Nicholas Violante, Pers. Mgr., Stanley Home Products, Inc., Easthampton, Massachusetts.

MM&R Helps Supply "Hope"

Magnus, Mabee & Reynard, Inc., New York manufacturer of essential oils and perfume bases, was one of the 52 industry suppliers to Project Hope, it was reported last month in the company's house organ "The House of Magnus." Project Hope was a program to equip and supply the former navy ship *USS Consolation*, renamed the *S.S. Hope*, as an 800-bed hospital ship and floating laboratory. Its purpose is to make available to the peoples of Southeast Asia some of the miracles of American surgery, medicine, dentistry, and pharmaceuticals. For the most part a teaching operation rather than an attempt at widespread treatment, the project was financed by contributions from American business and the Public.

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Crown Appoints Luviano

The election of John J. Luviano as vice-president of its Machinery Division was announced recently by Crown Cork & Seal Co., Inc., Philadelphia. He will supervise Crown's expanded machinery activity in the food and beverage industries. The company has announced plans to widen its activities in the food packaging field with newly designed equipment for nitrogen packaging.

Mr. Luviano has been with Crown for 8 years.

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SITUATIONS WANTED:

PHARMACEUTICAL CHEMIST — B. S. degree, age 42, 17 years of broad, diversified experience in the research and development of pharmaceuticals and aerosols. Capable of taking a product idea from its inception to the marketing level. Would be interested in development, production or technical sales. Desire to relocate in southern or far western U.S.A. or Latin America. Address Box 234, c/o Aerosol Age.

MISCELLANEOUS:

LEADING MANUFACTURER of synthetic rubber aerosol components requires the services of company or agent to sell their products, preferably organization already selling non-competitive parts with nationwide connections. Address Box 237, c/o Aerosol Age.

WELL ESTABLISHED FIRM desires to acquire an aerosol filling firm with principals who have broad aerosol experience. We have a large plant with full facilities for unlimited growth. Located in Maryland. Address Box 239, c/o Aerosol Age.

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Lentheric Names Kutner

The Lentheric-King's Men Division of Helene Curtis, Inc., Chicago, recently appointed David H. Kutner, director of marketing, a post which includes supervision of coordination of product development and research, merchandising, advertising, and sales.

Trade Mark Applications

Applications for registration of the following trademarks were published in recent issues of the *Official Gazette* of the U. S. Patent Office. In not all cases are there strictly aerosol trademarks, however, many of the products listed below come within the category of those for which a possible future use in aerosols is foreseen.

DAPPER, for starch. Filed May 16 by the Dill Co., Norristown, Pa., with first use given as May 4.

DECTON, for antiseptic dusting powder for veterinary use. Filed April 19 by Jensen-Salsbery Laboratories, Inc., Kansas City, Mo., giving first use as March 25.

PENTARCORT, for topical cream preparation for the treatment of dermatologic disorders. Filed April 27 by Dalin Pharmaceuticals, Inc., Bayside, N. Y., giving first use on or about April 15.

STERI-MAGIC, for preparation used as a disinfectant-germicide. Filed Nov. 30, 1959, by Lan-O-Sheen, Inc., St. Paul, Minn., reporting first use Oct. 1 of same year.

GARRY-8-S MELT, for liquid preparation applied in spray form for melting ice and snow on windshields, door locks and other weather-exposed parts. Filed Dec. 7, 1959, by Garry Laboratories, Inc., Buffalo, N. Y., giving first use on or about Nov. 9, 1959.

OUTDORABLE, for hair spray, cologne, and other cosmetics. Filed Dec. 2, 1959 by Outdorable, Inc., Portland, Ore., with first use reported as Nov. 11, 1959.

NEGASTAT, for static dust preventive which is used for coating surfaces and the like to eliminate static electricity accumulations and to repel dust therefrom. Filed April 11 by Playtime Products, Inc., Warsaw, Ind., with first use given as on or about May 29, 1951.

VANTAGE, for hair dressing. Filed Sept. 14, 1959 by Lucky Tiger Manufacturing Co., Kansas City, Mo., giving first use as Aug. 27 of same year.

LANTHOL-7, for lanolin preparation incorporated in a topical ointment. Filed April 5 by Arrow Medical Co., Miami, Fla., reporting first use as April 25, 1957.

PRIMADERM, for antiseptic, protective, soothing, and healing ointment. Filed April 5, by Arrow Medical Co., Miami, giving first use as March 9.

RUST MAGIC, for metal primer coating to stop rust and prevent corrosion. Filed Nov. 4, 1959 by Krylon, Inc., Norristown, Pa., claiming first use Sept. 27 of same year.

PEDIMYCIN, for therapeutic preparation for treatment of athlete's foot. Filed June 6 by The Pfeiffer Co., St. Louis, Mo., reporting first use as May 13.

SPUTNIK, for insecticide dispensing container particularly adapted for the control of flying insects. Filed Dec. 28, 1959 by Delmer Engineers, Bell, Calif., with first use given as July 10, 1958.

VIRGINAIRE, for scented air freshener spray. Filed March 15 by Virginaire Products, Inc., Charlottesville, Va., with first use reported as Dec. 7, 1959.

VET-CARE, for medicated oil for protecting animals against mange, parasitic insects, and the like. Filed Jan. 15, 1960 by Metals Processing & Welding Corp., Columbus, Ind., giving first use as Nov. 15, 1959.

KWIT, for insecticide. Filed April 5 by The O. M. Scott & Sons Co., Marysville, O., with first use given as March 17.

IODEO, for household deodorant with germicidal, bactericidal and fungicidal characteristics. Filed April 9, 1958 by Doho Chemical Corp., New York, claiming first use in Dec. 1957.

VAPONA, for insecticide. Filed April 5 by Shell Oil Co., New York, with first use reported as Feb. 9.

KNOCK 'EM DOWN, for insecticide, namely, a roach killer. Filed April 12 by EMT Chemical Corp., Paragould, Ark., reporting first use April 2.

EASY-ENZ, for starch. Filed April 19 by Corn Products Co., New York, claiming first use "at least as early as" Feb. 11.

STERI-SPRAY, for personal antiseptic applied to the skin for protection against infection. Filed Nov. 27, 1959 by The Mennen Co., Morris Township, N. J., with first use given as Oct. 5 of same year.

RESCUE, for hair spray. Filed Jan. 29, 1960 by Arrivals, Ltd., Chicago, giving first use as Nov. 4 of previous year.

STAX, for hair dressing preparation. Filed Feb. 9 by King Research, Inc., Brooklyn, N. Y., reporting first use in Aug., 1958.

HAZE, for insecticide-fungicide preparation for the protection of roses and other plants. Filed May 17 by The O. M. Scott & Sons Co., Marysville, O., with first use said to have been April 28.

D-TROL, for sterilizing agent and fungicide for control of slime and algae, prevention of odors and maintenance of sanitary conditions in food packing establishments. Filed Aug. 10, 1959 by Du Bois Chemicals Inc., Cincinnati, giving first use July 30, 1959.

ATHLECIN, for preparation for the treatment of athlete's foot. Filed Nov. 25, 1959 by The Mennen Co., Morris Township, N. J., giving first use as Oct. 1, 1959.

MILDARE, for chemical composition for germ-proofing and mildew-proofing textiles, not for food or edible purposes. Filed Nov. 2, 1958 by Metro-Atlantic, Inc., Centerdale, R. I., with first use reported as July 31 of same year.

KLOZE FRESH, for chemical composition designed for use as a spray to deodorize wearing apparel. Filed May 9, 1958 by Lora, Inc. Chicago, assignee, by mesne assignments, of La Bora, Inc., Chicago, with first use given as April 11, 1958.

RADAR, for hair dressing. Filed April 11 by The Procter & Gamble Co., Cincinnati, giving first use as Dec. 4, 1959.

Hazardous Labeling

(*From Page 19*)

law would appear to cover those aerosol products which might, though misdirection or excessive use by children (or adults) cause "substantial illness or injury." It would also appear to cover those products which might be determined to be irritating or strong sensitizers, either when sprayed onto the skin or breathed into the nasal passages. Exact determination about *which* products are covered will be up to the officials of the Federal Food and Drug Administration.

In his article Mr. Ackerly concludes "The responsibility for compliance with the law rests with each marketer." As with most legislation, ignorance of the law cannot be offered as an excuse. It can be validly assumed that at first the FDA will hesitate about "cracking down" on mislabeled products previously placed on the market. But the FDA can be expected to move quickly on flagrant violations of the law, i.e., large amounts of mislabeled products produced and labeled after the Jan. 12 date. Immediate steps to insure compliance with the law should obviously be the first order of business for every aerosol marketer.★

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WARF Forms Pesticide Group

The Wisconsin Alumni Research Foundation (WARF), Madison, Wis., has announced formation of a Pesticide Department, to include the former Insecticide Testing Laboratory and expanded facilities for testing and screening of compounds for activity as herbicides, fungicides, nematocides, bactericides, algaecides and others.

A 10,000 square foot building has been remodeled and will house the entire department. Among the increased services made possible by this move is a 1000 cubic foot Peet-Grady chamber for more accurate measurement of activity of household aerosol fly sprays.

Acting head of the department is G. E. Schmolesky, assisted by C. D. Kuzdas.

Spray Patterns

IN A MOVE we think was probably overdue, the Board of Directors of the Chemical Specialties Manufacturers last month approved the creation of a new post in the CSMA office—that of publicity director. With a membership fast approaching 500 companies (it's now 467), and with energetic Aerosol, Automotive, Detergent and Cleaning Compounds, Disinfectant and Sanitizers, Insecticide, and Waxes and Floor Finishes Divisions, the CSMA certainly needs such an important functionary. For 1961, incidentally, the total operating budget for the association will be $150,000.

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A somewhat startling thing happened to Don Tuttle, Risdon v.p. and sales manager for aerosol products, on his way from Miami Airport to the Hollywood Beach Hotel in a hired Hertz car. While he was driving along Biscayne Boulevard, a black gull-like bird flew in the car window (on the driver's side), brushed Don's head, and smashed into the rear window, breaking its neck. According to to Don's passengers, Bob McDonald and Norman Odell (of Norman Odell Associates), Don, somewhat ruffled, stopped the car, threw out the dead bird, and proceeded on his way. He wonders now whether the Hertz people will think there's been some violence done when they find traces of blood in the back seat.

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The weather, which hasn't been very kind to CSMA conventions in Florida (last time it ranged between 40 and 50°), this time chose again not to cooperate. Almost incessant cloudiness threw a damper on swimming and other outdoor events and many attendees came back looking paler than when they left. To top it off, weekend returnees to the Northeast had to cope with the worst blizzard to hit the area in 13 years.

The December meeting is always end-of-term time for CSMA Aerosol Division officers. Among those who finished their terms of office last month two are especially worthy of mention. Walter Beard, who ended a two-year term as chairman of the Scientific Committee, performed in a patient, diplomatic, and generally fine manner. Similarly Ed McKernan, who ended a one-year term as chairman of the Aerosol Division Executive Board.

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Junkets and entertainment, always sore points in any discussion of the CSMA convention, came in for more criticism at Hollywood Beach in the wake of a one-day outing by a large number of the attendees. No comment from here, but we hear some people are moving for further rule tightening.

This intriguing Halloween costume was thought up by Ira Wolfson, president of Pace, Inc. Wilmington custom filler. It actually was equipped to spray a fragrance out of the valve at top. The legs belong to Mrs. Wolfson.

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Word comes from Washington that a rift has developed within the Federal Trade Commission (which has been getting tough with aerosol advertisers of late) Commissioners Sigurd Anderson, Edward Tait, and William C. Kern, according to *Drug Trade News* Washington editor Stephens Rippey. Present the growing impression that the name FTC and Commission Chairman are synonymous. They feel, Mr. Rippey writes, that Mr. Kintner has failed to distribute credit for the work of his four colleagues.